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NEWS 4 MAR 20 MARPAT now updated daily

NEWS 5 MAR 22 LWPI reloaded

NEWS 6 MAR 30 RDISCLOSURE reloaded with enhancements

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NEWS 11 APR 30 INPADOC replaced by INPADOCDB on STN

NEWS 12 MAY 01 New CAS web site launched

NEWS 13 MAY 08 CA/Caplus Indian patent publication number format defined

NEWS 14 MAY 14 RDISCLOSURE on STN Easy enhanced with new search and display fields

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NEWS 16 MAY 21 TOXCENTER enhanced with BIOSIS reload

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NEWS 18 MAY 22 CA/CAplus enhanced with IPC reclassification in Japanese patents

NEWS 19 JUN 18 CA/CAplus to be enhanced with pre-1967 CAS Registry Numbers

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- => S (Folate receptor)(S)autoantibodies AND pd<=20031107 2 FILES SEARCHED...
- L1 0 (FOLATE RECEPTOR)(S) AUTOANTIBODIES AND PD<=20031107
- => S (Folate(W)receptor)(S)antibodies AND pd<=20031107
 1 FILES SEARCHED...</pre>
- L2 69 (FOLATE(W) RECEPTOR)(S) ANTIBODIES AND PD<=20031107
- => Dup Rem L2

PROCESSING COMPLETED FOR L2

L3 25 DUP REM L2 (44 DUPLICATES REMOVED)

ANSWERS '1-17' FROM FILE MEDLINE

ANSWERS '18-19' FROM FILE BIOSIS

ANSWERS '20-25' FROM FILE CAPLUS

- => D ti L3 1-25
- L3 ANSWER 1 OF 25 MEDLINE on STN DUPLICATE 1
- TI Reversion of transformed phenotype in ovarian cancer cells by intracellular expression of anti folate receptor antibodies.
- L3 ANSWER 2 OF 25 MEDLINE on STN DUPLICATE 2
- TI Antibodies to folate receptors impair embryogenesis and fetal development in the rat.
- L3 ANSWER 3 OF 25 MEDLINE on STN DUPLICATE 3
- TI Immunotherapy of folate receptor-expressing tumors: review of recent advances and future prospects.
- L3 ANSWER 4 OF 25 MEDLINE on STN DUPLICATE 4
- TI Biodistribution of a 153 Gd-folate dendrimer, generation = 4, in mice with folate-receptor positive and negative ovarian tumor xenografts.
- L3 ANSWER 5 OF 25 MEDLINE on STN DUPLICATE 5
- TI Folate targeting of haptens to cancer cell surfaces mediates immunotherapy of syngeneic murine tumors.
- L3 ANSWER 6 OF 25 MEDLINE on STN DUPLICATE 6
- TI The alpha folate receptor is highly activated in malignant pleural mesothelioma.
- L3 ANSWER 7 OF 25 MEDLINE on STN DUPLICATE 7
- TI Characterization of a folate receptor in parotid gland and a folate binding protein in saliva from humans. Epitope relatedness to human milk folate binding protein.

- L3 ANSWER 8 OF 25 MEDLINE on STN DUPLICATE 8
- TI Interaction of folate receptor with signaling molecules lyn and G(alpha)(i-3) in detergent-resistant complexes from the ovary carcinoma cell line IGROV1.
- L3 ANSWER 9 OF 25 MEDLINE on STN DUPLICATE 9
- TI Targeted drug delivery via the folate receptor.
- L3 ANSWER 10 OF 25 MEDLINE on STN DUPLICATE 10
- TI High-affinity folate receptor in human ovary, serous ovarian adenocarcinoma, and ascites: radioligand binding mechanism, molecular size, ionic properties, hydrophobic domain, and immunoreactivity.
- L3 ANSWER 11 OF 25 MEDLINE on STN DUPLICATE 11
- TI Folate receptors in malignant and benign tissues of human female genital tract.
- L3 ANSWER 12 OF 25 MEDLINE on STN DUPLICATE 12
- TI Single-chain Fv/folate conjugates mediate efficient lysis of folate-receptor-positive tumor cells.
- L3 ANSWER 13 OF 25 MEDLINE on STN DUPLICATE 13
- TI Characterization of the folate receptor in human molar placenta.
- L3 ANSWER 14 OF 25 MEDLINE on STN DUPLICATE 14
- TI Conjugates of folate and anti-T-cell-receptor antibodies specifically target folate-receptor-positive tumor cells for lysis.
- L3 ANSWER 15 OF 25 MEDLINE on STN DUPLICATE 15
- TI A high-affinity soluble folate receptor in fluids of non-neoplastic ovarian cysts: radioligand binding, molecular size, hydrophobic residue, and immunological properties.
- L3 ANSWER 16 OF 25 MEDLINE on STN DUPLICATE 16
- TI Folate receptor in malignant effusions of ovarian carcinoma.
- L3 ANSWER 17 OF 25 MEDLINE on STN DUPLICATE 17
- TI Megaloblastic hematopoiesis in vitro. Interaction of anti-folate receptor antibodies with hematopoietic progenitor cells leads to a proliferative response independent of megaloblastic changes.
- L3 ANSWER 18 OF 25 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN
- TI GPI ANCHORED PROTEINS AND LIPID RAFTS IN CHEMORESPONSE.
- L3 ANSWER 19 OF 25 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN
- TI The folate receptor as a potential therapeutic anticancer target.
- L3 ANSWER 20 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN
- TI Methods and compositions for use in the treatment of filovirus mediated disease conditions
- L3 ANSWER 21 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN
- TI DNA vaccination against the ovarian carcinoma-associated antigen folate receptor α (FR $\!\alpha$) induces cytotoxic T lymphocyte and antibody responses in mice
- L3 ANSWER 22 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN
- TI Bispecific agents target endogenous murine T cells against human tumor

xenografts

- L3 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN
- TI Folate receptor-directed metalloprotease purification and use in gene therapy or immunotherapy
- L3 ANSWER 24 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN
- TI Conjugates of folate anti-effector cell antibodies
- L3 ANSWER 25 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN
- TI New anti-lung-cancer antibody cluster 12 reacts with human folate receptors present on adenocarcinoma
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TOTAL

L1 0 S (FOLATE RECEPTOR) (S) AUTOANTIBODIES AND PD<=20031107

L2 69 S (FOLATE(W)RECEPTOR)(S)ANTIBODIES AND PD<=20031107

L3 25 DUP REM L2 (44 DUPLICATES REMOVED)

=> D ibib abs L3 1, 2, 3, 5, 10,11,13,15-17, 19-20

L3 ANSWER 1 OF 25 MEDLINE on STN DUPLICATE 1

ACCESSION NUMBER: 2003251987 MEDLINE DOCUMENT NUMBER: PubMed ID: 12776159

TITLE: Reversion of transformed phenotype in ovarian cancer cells

by intracellular expression of anti folate

receptor antibodies.

AUTHOR: Figini M; Ferri R; Mezzanzanica D; Bagnoli M; Luison E;

Miotti S; Canevari S

CORPORATE SOURCE: Department of Experimental Oncology, Unit of Molecular

Therapies, Istituto Nazionale Tumori, Via Venezian 1, 20133

Milan, Italy.

SOURCE: Gene therapy, (2003 Jun) Vol. 10, No. 12, pp.

1018-25.

Journal code: 9421525. ISSN: 0969-7128.

PUB. COUNTRY: England: United Kingdom

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200307

ENTRY DATE: Entered STN: 31 May 2003

Last Updated on STN: 22 Jul 2003 Entered Medline: 21 Jul 2003

AΒ The alpha-folate receptor (FR) is selectively overexpressed in 90% of nonmucinous ovarian carcinomas, whereas no expression is detectable in normal ovarian surface epithelium (OSE). Indirect evidence suggests that FR expression is associated with tumor progression and affects cell proliferation. To evaluate better the role of FR, we developed an approach based on intracellular expression of single-chain (sc) antibodies (intrabody) to downmodulate membrane expression of FR in ovary cancer cells. IGROV-1 and SKOV3 ovarian carcinoma cell lines were transfected with an anti-FR intrabody. Transfectants and parental cells were tested for FR, integrins and anti-FR intrabody expression by fluorescenceactivated cell sorting (FACS), reverse transcription and polymerase chain reaction (RT-PCR) and/or immunoblotting. Cell growth characteristics and adhesion properties were evaluated in liquid, semisolid and organotypic cultures. The anti-FR scFv inhibited FR expression from 60 to 99%. At physiological concentrations of folate, proliferation varied directly as a function of FR expression. FR downmodulation was accompanied by reduced colony-forming ability in soft agar, morphological change of the cells, significant enhanced adhesion to laminin or Matrigel, a two- to three-fold increase in alpha6beta4 integrin expression, and a marked reduction in laminin production. In three-dimensional organotypic cultures, anti-FR intrabody-transfected IGROV1 cells grew as a single-ordered layer, reminiscent of normal OSE growth in vivo. In conclusion, the anti-FR intrabody reverses the transformed phenotype in ovary cancer cells and may provide an efficient means to inhibit selectively the growth of these cells.

L3 ANSWER 2 OF 25 MEDLINE on STN DUPLICATE 2

ACCESSION NUMBER: 2004043929 MEDLINE DOCUMENT NUMBER: PubMed ID: 14745937

TITLE: Antibodies to folate receptors

impair embryogenesis and fetal development in the rat.

AUTHOR: da Costa Maria; Sequeira Jeffrey M; Rothenberg Sheldon P;

Weedon Jeremy

CORPORATE SOURCE: SUNY-Downstate Medical Center, Department of Medicine,

Brooklyn, New York 11203, USA.. maria.dacosta@downstate.edu

SOURCE: Birth defects research. Part A, Clinical and molecular

teratology, (2003 Oct) Vol. 67, No. 10, pp.

837-47.

Journal code: 101155107. ISSN: 1542-0752.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE) (RESEARCH SUPPORT, NON-U.S. GOV'T)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200406

ENTRY DATE: Entered STN: 28 Jan 2004

Last Updated on STN: 24 Jun 2004 Entered Medline: 21 Jun 2004

BACKGROUND: Folic acid (FA) supplementation reduces neural tube defects AΒ (NTDs) by 70%. However, the cause of most NTDs cannot be attributed to folate deficiency, to mutations of genes that encode folate pathway enzymes, and folate receptors (FRs) that mediate cellular folate uptake. Mouse embryos nullizygous for the ortholog of the FRalpha gene have lethal congenital abnormalities that are preventable by administration of folinic acid to the dams. To determine whether antibodies to FRs are similarly teratogenic, we studied a rat model. METHODS: Immunohistochemistry with an antiserum to rat FRs was used to identify the receptors on reproductive tissues and embryos. Gestation day (GD) 8 rats received intraperitoneal injections of antiserum to the FRs, and their embryos were examined 2-9 days later. Some rats received pharmacologic doses of folinic acid or dexamethasone before the antiserum was administered. RESULTS: The FRs are present on oocytes, the oviduct, and uterine epithelial cells, and in the embryo at all stages examined between GD4 and GD15. The antiserum has a dose-related effect on embryo viability and organogenesis. Folinic acid prevented teratogenicity resulting from smaller doses of antiserum, but not that caused by larger doses. Resorption of embryos with the larger doses of the antiserum was prevented by dexamethasone. CONCLUSIONS: FRs are expressed on oocytes, epithelial cells of reproductive organs, and embryonic and extraembryonic tissues. Antiserum to FRs administered to pregnant rats causes embryonic damage. Embryo lethality with smaller doses of antiserum is preventable by administration of folinic acid, while larger doses cause embryo damage by immune-mediated cell lysis, which can be prevented by dexamethasone. Copyright 2003 Wiley-Liss, Inc.

L3 ANSWER 3 OF 25 MEDLINE on STN DUPLICATE 3

ACCESSION NUMBER: 2003395984 MEDLINE DOCUMENT NUMBER: PubMed ID: 12932634

TITLE: Immunotherapy of folate receptor-expressing tumors: review

of recent advances and future prospects.

AUTHOR: Lu Yingjuan; Low Philip S

CORPORATE SOURCE: Endocyte, Inc., 1205 Kent Ave., West Lafayette, IN 47906,

USA.

CONTRACT NUMBER: CA 89581 (NCI)

SOURCE: Journal of controlled release: official journal of the

Controlled Release Society, (2003 Aug 28) Vol.

91, No. 1-2, pp. 17-29. Ref: 89

Journal code: 8607908. ISSN: 0168-3659.

PUB. COUNTRY: Netherlands

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

(RESEARCH SUPPORT, U.S. GOV'T, P.H.S.)

General Review; (REVIEW)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200310

ENTRY DATE: Entered STN: 23 Aug 2003

Last Updated on STN: 16 Oct 2003 Entered Medline: 15 Oct 2003

AB The cell surface receptor for the vitamin folic acid (termed the folate receptor), is often elevated in cancers of the ovary, kidney, lung, mammary gland, brain, endometrium, and myeloid cells of hematopoietic origin. Because the folate receptor (FR) is either absent from normal tissues or localized to the apical surfaces of polarized epithelia, where it is inaccessible to circulating drugs, folate-linked drugs do not normally accumulate in healthy tissues. However, since the same receptor is fully accessible on cancer cells, it has frequently been exploited as a target for receptor-directed cancer therapies, including chemotherapies and immunotherapies. In fact, most strategies for the immunotherapy of cancer have at some time been adapted to treat FR-expressing tumors. In this article, recent progress in the retargeting of the immune system to

folate receptor-expressing cancers is summarized and future strategies for redirecting natural killer cells, antibodies and cytotoxic T lymphocytes to this large class of malignancies are proposed.

L3 ANSWER 5 OF 25 MEDLINE on STN DUPLICATE 5

ACCESSION NUMBER: 2002207069 MEDLINE DOCUMENT NUMBER: PubMed ID: 11941454

TITLE: Folate targeting of haptens to cancer cell surfaces mediates immunotherapy of syngeneic murine tumors.

AUTHOR: Lu Yingjuan; Low Philip S

CORPORATE SOURCE: Department of Chemistry, 1393 Brown Building, Purdue

University, West Lafayette, IN 47907, USA.

SOURCE: Cancer immunology, immunotherapy : CII, (2002 May)

Vol. 51, No. 3, pp. 153-62. Electronic Publication:

2002-03-19.

Journal code: 8605732. ISSN: 0340-7004.

PUB. COUNTRY: Germany, Federal Republic of
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
(RESEARCH SUPPORT, NON-U.S. GOV'T)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200206

ENTRY DATE: Entered STN: 10 Apr 2002

Last Updated on STN: 5 Jan 2003 Entered Medline: 3 Jun 2002

A variety of human cancers overexpress a cell surface receptor with high AB affinity for the vitamin, folic acid (K(d) approximately 10(-10)M). Covalent attachment of therapeutic agents to folic acid has been shown to allow efficient targeting of the folate-drug conjugates to folate receptor-expressing cancer cells, with little or no uptake by normal tissues except the kidneys. We report here the use of folate's ability to deliver attached molecules specifically to cancer cells to convert poorly immunogenic tumors into highly immunogenic tissue targets. By linking folic acid to a model hapten, we have been able to decorate folate receptor-expressing cancer cell surfaces with >10(6) haptens/cell in vivo. Following marking of such cells with haptens, the cells are observed to become opsonized with autologous anti-hapten antibodies, which is presumed to mediate cell removal via antibody-dependent cellular cytotoxicity (ADCC). Supplemental administration of low levels of ADCC-activating cytokines [e.q. interleukin-2 (IL-2) and interferon-alpha (IFN-alpha)] has been shown to synergize with the folate-targeted immunotherapy. Thus, using M109 syngeneic lung cancer cells injected intraperitoneally into Balb/c mice that were previously immunized against fluorescein, a significant extension of life span is observed following treatment with folate-fluorescein conjugates, and complete cures are observed upon supplementation with moderate levels of IL-2 and IFN-alpha. Because control tumor-bearing mice treated with the same cytokines but with non-targeted fluorescein show no extension of life span, we conclude that tumor-specific opsonization is an essential step in this immunotherapy. Finally, because the anti-fluorescein antibodies are unable to access the folate receptors on the apical membranes of the kidney proximal tubules, no kidney or other normal tissue cytotoxicity is observed. These data suggest that retargeting of haptens to folate receptor-expressing cancers might constitute a method for mobilizing the immune system specifically against poorly immunogenic tumors.

L3 ANSWER 10 OF 25 MEDLINE on STN DUPLICATE 10

ACCESSION NUMBER: 1999286124 MEDLINE DOCUMENT NUMBER: PubMed ID: 10356282

TITLE: High-affinity folate receptor in human ovary, serous ovarian adenocarcinoma, and ascites: radioligand binding

mechanism, molecular size, ionic properties, hydrophobic

domain, and immunoreactivity.

AUTHOR: Holm J; Hansen S I; Hoier-Madsen M; Birn H; Helkjaer P E

CORPORATE SOURCE: Department of Clinical Chemistry, Central Hospital,

Herning, Denmark.

SOURCE: Archives of biochemistry and biophysics, (1999 Jun

15) Vol. 366, No. 2, pp. 183-91.

Journal code: 0372430. ISSN: 0003-9861.

PUB. COUNTRY: United States
DOCUMENT TYPE: (COMPARATIVE STUDY)

Journal; Article; (JOURNAL ARTICLE) (RESEARCH SUPPORT, NON-U.S. GOV'T)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199907

ENTRY DATE: Entered STN: 15 Jul 1999

Last Updated on STN: 15 Jul 1999 Entered Medline: 7 Jul 1999

AB High-affinity folate receptors are expressed in normal ovaries and ovarian carcinomas. Binding of [3H]folate in human ovary, serous ovarian carcinoma tissue, and ascites is a complex process that has not been well characterized. This study shows changes in binding affinity and mechanism of binding with decreasing receptor concentration, inhibition by folate derivatives, and a slow radioligand dissociation at pH 7.4 becoming rapid and complete at pH 3.5. The receptor seems to be positively charged since it elutes in the front effluent of a DEAE-Sepharose CL-6B ion-exchange column at pH 6.3. The gel filtration profile of Triton X-100-solubilized

tissue and ascites contained two peaks of radioligand-bound receptor (25 and 100 kDa). Exposure of ascites to cleavage by phosphatidylinositol-specific phospholipase C resulted in a partial conversion of the 100-kDa peak to a 25-kDa peak. This suggests that the receptor may be anchored to the membrane by a glycosylphosphatidyl residue that inserts into Triton X-100 micelles, resulting in a large molecular size on gel filtration.

The receptor in ovarian carcinoma tissue immunoreacts with

antibodies against purified human milk folate

receptor protein as shown by enzyme-linked immunosorbent assay, immunoprecipitation, sodium dodecyl sulfate-polyacrylamide gel electrophoresis immunoblotting (a single band of 45 kDa), and immunohistochemistry. In only three of seven ovarian carcinomas did expression of radioligand-bound receptors exceed levels found in five normal ovaries. However, only receptors in ovarian carcinoma specimens showed a high degree of immunoreactivity. Hence, even without elevations of the total receptor level, a folate receptor isoform homologous to human milk folate receptor protein seemed to prevail in serous ovarian carcinomas.

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L3 ANSWER 11 OF 25 MEDLINE on STN DUPLICATE 11

ACCESSION NUMBER: 1998033926 MEDLINE DOCUMENT NUMBER: PubMed ID: 9367057

TITLE: Folate receptors in malignant and benign tissues of human

female genital tract.

AUTHOR: Holm J; Hansen S I; Hoier-Madsen M; Helkjaer P E; Nichols C

W

CORPORATE SOURCE: Department of Clinical Chemistry, Horsens Hospital,

Denmark.

SOURCE: Bioscience reports, (1997 Aug) Vol. 17, No. 4,

pp. 415-27.

Journal code: 8102797. ISSN: 0144-8463.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

(RESEARCH SUPPORT, NON-U.S. GOV'T)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199801

ENTRY DATE: Entered STN: 30 Jan 1998

Last Updated on STN: 30 Jan 1998 Entered Medline: 20 Jan 1998

AΒ We have characterized the folate receptor in malignant and benign tissues of human female genital tract (Fallopian tube and benign and malignant tissues of uterus). Radioligand binding displayed characteristics similar to those of other folate binding proteins. Those include a high-affinity type of binding (K = 10(10)M-1), apparent positive cooperativity, a slow dissociation at pH 7.4 becoming rapid at pH 3.5, and inhibition of binding by folate analogues. The gel filtration profile of Triton X-100solubilized tissue contained two large peaks of 3H-folate labelled protein (> = 130 and 100 kDa) as well as a $2\overline{5}$ kDa peak. Only a single band of 70 kDa was seen on SDS-PAGE immunoblotting. The large molecular size forms on gel filtration appear to represent folate receptors having a hydrophobic membrane anchor inserted into Triton X-100 micelles. folate receptor of female genital tract showed cross-reactivity in ELISA and positive immunostaining with rabbit antibodies against human milk folate binding protein. Variations in the ratio of immunoresponse to total high affinity folic acid binding suggests the presence of multiple isoforms of the receptor in different types of malignant and benign tissues.

L3 ANSWER 13 OF 25 MEDLINE on STN DUPLICATE 13

ACCESSION NUMBER: 97070602 MEDLINE DOCUMENT NUMBER: PubMed ID: 8913528

TITLE: Characterization of the folate receptor in human molar

placenta.

AUTHOR: Holm J; Hansen S I; Nichols C W; Hoier-Madsen M; Helkjaer P

Ε

CORPORATE SOURCE: Department of Clinical Chemistry, Horsens Hospital,

Denmark.

SOURCE: Bioscience reports, (1996 Oct) Vol. 16, No. 5,

pp. 379-89.

Journal code: 8102797. ISSN: 0144-8463.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

(RESEARCH SUPPORT, NON-U.S. GOV'T)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199704

ENTRY DATE: Entered STN: 24 Apr 1997

Last Updated on STN: 24 Apr 1997 Entered Medline: 14 Apr 1997

AB We have characterized a high-affinity folate receptor in human molar placenta tissue. Radioligand binding exhibited characteristics typical of other high-affinity folate binding proteins. Those included, positive cooperativity, a tendency to increased binding affinity with decreasing receptor concentration, a slow ligand dissociation at pH 7.4 becoming rapid at pH 3.5, and inhibition by folate analogues. The folate receptor cross-reacted with antibodies against human milk folate binding protein, e.g. the syncytothrophoblastic layer of molar placenta tissue sections showed strongly positive immunostaining. The gel filtration profile contained two radioligand-bound peaks (25 and 100 kDa), however, with considerable overlap. Only a single band of 70 kDa was seen on SDS-PAGE immunoblotting. The folate receptor in placental tissue may play a crucial role in the transfer of folate from maternal circulation to the fetus.

ACCESSION NUMBER: 96163445 MEDLINE DOCUMENT NUMBER: PubMed ID: 8562026

TITLE: A high-affinity soluble folate receptor in fluids of non-neoplastic ovarian cysts: radioligand binding,

molecular size, hydrophobic residue, and immunological

properties.

AUTHOR: Holm J; Hansen S I; Hoier-Madsen M; Helkjaer P E; Bzorek M

CORPORATE SOURCE: Department of Clinical Chemistry, Central Hospital,

Nykobing Falster, Denmark.

SOURCE: APMIS : acta pathologica, microbiologica, et immunologica

Scandinavica, (1995 Dec) Vol. 103, No. 12, pp.

862-8.

Journal code: 8803400. ISSN: 0903-4641.

PUB. COUNTRY: Denmark

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE) (RESEARCH SUPPORT, NON-U.S. GOV'T)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199603

ENTRY DATE: Entered STN: 15 Mar 1996

Last Updated on STN: 15 Mar 1996

Entered Medline: 7 Mar 1996

The presence of a soluble folate receptor in fluids of non-neoplastic AΒ ovarian cysts was demonstrated. Radioligand binding exhibited characteristics typical of high-affinity folate-binding proteins. included positive cooperativity, a tendency to increased binding affinity with decreasing receptor concentration, a slow ligand dissociation at pH 7.4 and inhibition by folate analogues. The folate receptor was probably synthesized in the lining epithelial cells of the cysts which showed positive immunostaining with antibodies against human milk folate-binding protein. The gel filtration profile of cystic fluid contained two radioligand-bound peaks, 25 and 100 kDa, whereas a single band of 70 kDa was seen on SDS-PAGE immunoblotting. Treatment with the enzyme phosphatidylinositol-specific phospholipase C resulted in a partial conversion of the 100 kDa peak to the 25 kDa peak. This suggests that insertion of a hydrophobic glycosylphosphatidylinositol tail into Triton X-100 micelles could give rise to large molecular size forms of the receptor on gel filtration.

L3 ANSWER 16 OF 25 MEDLINE on STN DUPLICATE 16

ACCESSION NUMBER: 96085076 MEDLINE DOCUMENT NUMBER: PubMed ID: 7488388

TITLE: Folate receptor in malignant effusions of ovarian

carcinoma.

AUTHOR: Holm J; Hansen S I; Hoier-Madsen M; Helkjaer P E; Bzorek M CORPORATE SOURCE: Department of Clinical Chemistry, Central Hospital Nykobing

Falster, Denmark.

SOURCE: APMIS : acta pathologica, microbiologica, et immunologica

Scandinavica, (1995 Sep) Vol. 103, No. 9, pp.

663-70.

Journal code: 8803400. ISSN: 0903-4641.

PUB. COUNTRY: Denmark

DOCUMENT TYPE: (CASE REPORTS)

Journal; Article; (JOURNAL ARTICLE) (RESEARCH SUPPORT, NON-U.S. GOV'T)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199601

ENTRY DATE: Entered STN: 25 Jan 1996

Last Updated on STN: 25 Jan 1996

Entered Medline: 4 Jan 1996

AB Binding of 3H-folate in human ovarian adenocarcinoma tissue was of a

high-affinity type (K approximately 10(10) M-1) and displayed apparent positive cooperatively. A high-affinity folate receptor was also present in ascitic fluid and pleural effusion. Radioligand dissociation was slow at pH 7.4, but rapid at pH 3.5. The folate analogues methotrexate and in particular 5-formyltetrahydrofolate acted as inhibitors of 3H-folate binding in ascitic fluid. Ovarian adenocarcinoma tissue showed immunostaining with rabbit antibodies against human milk folate-binding protein. The gel filtration diagram contained two peaks of radiolabelled folate (at 25 and 100 kDa). The 25 kDa peak was predominant in ascitic fluid and pleural effusion. A single band of 70 kDa was seen on SDS-PAGE immunoblotting of tissue and malignant effusions. The concentration of folate receptor in tissue and fluid specimens could be determined by an immunochemical method (ELISA) utilizing antibodies against human milk folate-binding protein.

L3 ANSWER 17 OF 25 MEDLINE on STN DUPLICATE 17

ACCESSION NUMBER: 91086466 MEDLINE DOCUMENT NUMBER: PubMed ID: 1702099

TITLE: Megaloblastic hematopoiesis in vitro. Interaction of anti-

folate receptor antibodies with

hematopoietic progenitor cells leads to a proliferative

response independent of megaloblastic changes.

AUTHOR: Antony A C; Briddell R A; Brandt J E; Straneva J E; Verma R

S; Miller M E; Kalasinski L A; Hoffman R

CORPORATE SOURCE: Department of Medicine, Indiana University School of

Medicine, Indianapolis 46202-5121.

CONTRACT NUMBER: R01 AA08307 (NIAAA)

R01 HD 20889 (NICHD)

SOURCE: The Journal of clinical investigation, (1991 Jan)

Vol. 87, No. 1, pp. 313-25.

Journal code: 7802877. ISSN: 0021-9738.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

(RESEARCH SUPPORT, U.S. GOV'T, P.H.S.)

LANGUAGE: English

FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals

ENTRY MONTH: 199102

ENTRY DATE: Entered STN: 22 Mar 1991

Last Updated on STN: 29 Jan 1996

Entered Medline: 1 Feb 1991

AΒ We tested the hypothesis that anti-placental folate receptor (PFR) antiserum-mediated effects on hematopoietic progenitor cells in vitro of increased cell proliferation and megaloblastic morphology were independent responses. We determined that (a) purified IgG from anti-PFR antiserum reacted with purified apo- and holo-PFR and specifically immunoprecipitated a single (44-kD) iodinated moiety on cell surfaces of low density mononuclear cells (LDMNC); (b) when retained in culture during in vitro hematopoiesis, anti-PFR IgG (in contrast to PFR-neutralized anti-PFR IgG and nonimmune IgG) consistently led to increased cloning efficiency of colony forming unit-erythroid (CFU-E), burst forming unit-E (BFU-E), CFU-granulocyte macrophage (CFU-GM), and CFU-GEM megakaryocyte (CFU-GEMM), and objectively defined megaloblastic changes in orthochromatic normoblasts from CFU-E- and BFU-E-derived colonies; (c) when anti-PFR antiserum was removed after initial (less than 1 h) incubation with LDMNC, a cell proliferation response was induced, but megaloblastic changes were not evident. (d) Conversely, delay at 4 degrees C for 24 h before long-term plating with antiserum resulted in megaloblastosis without increased cell proliferation; (e) however, 500-fold molar excess extracellular folate concentrations completely abrogated the expected anti-PFR antiserum-induced megaloblastic changes, without altering cell proliferative responses. Thus, although cell proliferative and megaloblastic changes are induced after short-term and

prolonged interaction of antibody with folate receptors on hematopoietic progenitors, respectively, they are independent effects.

L3 ANSWER 19 OF 25 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on

STN

ACCESSION NUMBER: 1999:308455 BIOSIS DOCUMENT NUMBER: PREV199900308455

TITLE: The folate receptor as a potential therapeutic anticancer

target.

AUTHOR(S): Gruner, Barbara A. [Reprint author]; Weitman, Steven D.

[Reprint author]

CORPORATE SOURCE: Department of Pediatrics, University of Texas Health

Science Center, San Antonio, TX, USA

SOURCE: Investigational New Drugs, (1998-1999) Vol. 16,

No. 3, pp. 205-219. print.

CODEN: INNDDK. ISSN: 0167-6997.

DOCUMENT TYPE: Article

General Review; (Literature Review)

LANGUAGE: English

ENTRY DATE: Entered STN: 12 Aug 1999

Last Updated on STN: 12 Aug 1999

L3 ANSWER 20 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2001:434882 CAPLUS

DOCUMENT NUMBER: 135:45191

TITLE: Methods and compositions for use in the treatment of

filovirus mediated disease conditions

INVENTOR(S): Goldsmith, Mark A.; Chan, Stephen Y.

PATENT ASSIGNEE(S): The Regents of the University of California, USA

SOURCE: PCT Int. Appl., 51 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| | PA: | CENT I | | | KIND DATE | | | | APPLICATION NO. | | | | | | DATE | | | |
|------|-----------------------|--------------|-------|-----|-----------|-------------|-----|--------|-----------------|-----|------|------|------|------------|------|------|-------|-------|
| | WO | 0 2001041784 | | | | A1 20010614 | | | WO 2000-US33403 | | | | | 20001207 < | | | | |
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| | US | 20030 | 0825 | 17 | | A1 | | 2003 | 0501 | | US 2 | 000- | 7333 | 95 | | 2 | 0001 | 208 < |
| | US | 6933 | 108 | | | В2 | | 2005 | 0823 | | | | | | | | | |
| | US | 20052 | 2660. | 22 | | A1 | | 2005 | 1201 | | US 2 | 005- | 1042 | 11 | | 2 | 0050 | 411 |
| PRIO | RIORITY APPLN. INFO.: | | | | | | | | | | US 1 | 999- | 1700 | 04P |] | P 1 | 9991. | 209 |
| | | | | | | | | | | | US 2 | 000- | 2374 | 21P |] | P 2 | 0001 | 002 |
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AB Methods and compns. are provided for at least slowing the progression of a filovirus mediated disease condition in a host. In the subject methods, an effective amount of an agent that at least reduces the amount of folate receptor mediated filovirus cell entry is administered to the host. The subject methods find use in both the prevention and treatment of filovirus associated disease conditions, including Marburg and Ebola-Zaire virus mediated disease conditions.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS

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=> D Ti L5 1-7

L5 ANSWER 1 OF 7 MEDLINE on STN DUPLICATE 1 ΤI Maternal folate receptor autoantibodies and cleft lip and/or palate.

L5 ANSWER 2 OF 7 MEDLINE on STN DUPLICATE 2

- Autoantibodies to folate receptors in the ΤТ cerebral folate deficiency syndrome.
- ANSWER 3 OF 7 MEDLINE on STN DUPLICATE 3 L5
- Autoantibodies against folate receptors in TΤ women with a pregnancy complicated by a neural-tube defect.
- ANSWER 4 OF 7 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN L5
- ΤI Could maternal autoantibodies against folate receptor-membrane proteins cause spontaneous abortion or congenital heart defects?.
- L5 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN
- ΤI Prevention and therapy of cerebral folate deficiency
- ANSWER 6 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN L_5
- Immunoassay for detection of autoantibodies to folate binding protein ΤI
- L_5 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN
- Assay for autoantibodies to folate receptors ТΤ

=> D ibib abs L5 1-7

ANSWER 1 OF 7 MEDLINE on STN DUPLICATE 1

ACCESSION NUMBER: 2006223898 MEDLINE DOCUMENT NUMBER: PubMed ID: 16546188 TITLE: Maternal folate receptor

autoantibodies and cleft lip and/or palate.

AUTHOR: Bliek J B; Rothenberg S P; Steegers-Theunissen R P M Department of Obstetrics and Gynecology/Division of CORPORATE SOURCE:

Obstetrics and Prenatal Medicine, Erasmus MC, University Medical Center, Rotterdam, Nijmegen, The Netherlands.

International journal of gynaecology and obstetrics: the SOURCE:

official organ of the International Federation of

Gynaecology and Obstetrics, (2006 May) Vol. 93, No. 2, pp. 142-3. Electronic Publication: 2006-03-20.

Journal code: 0210174. ISSN: 0020-7292.

PUB. COUNTRY: Ireland

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

English LANGUAGE: FILE SEGMENT: Priority Journals

ENTRY MONTH: 200610

ENTRY DATE: Entered STN: 25 Apr 2006

> Last Updated on STN: 1 Nov 2006 Entered Medline: 31 Oct 2006

ANSWER 2 OF 7 MEDLINE on STN DUPLICATE 2

ACCESSION NUMBER: 2005249651 MEDLINE PubMed ID: 15888699 DOCUMENT NUMBER: TITLE: Autoantibodies to folate

receptors in the cerebral folate deficiency

AUTHOR: Ramaekers Vincent T; Rothenberg Sheldon P; Sequeira Jeffrey

M; Opladen Thomas; Blau Nenad; Quadros Edward V; Selhub

Jacob

CORPORATE SOURCE: Division of Pediatric Neurology, Department of Pediatrics,

University Hospital Aachen, Aachen, Germany..

vramaekers@ukaachen.de

SOURCE: The New England journal of medicine, (2005 May 12) Vol.

352, No. 19, pp. 1985-91.

Journal code: 0255562. E-ISSN: 1533-4406.

United States PUB. COUNTRY:

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

(RESEARCH SUPPORT, NON-U.S. GOV'T)

LANGUAGE: English

Abridged Index Medicus Journals; Priority Journals FILE SEGMENT:

200505 ENTRY MONTH:

ENTRY DATE: Entered STN: 13 May 2005

> Last Updated on STN: 20 May 2005 Entered Medline: 19 May 2005

In infantile-onset cerebral folate deficiency, 5-methyltetrahydrofolate (5MTHF) levels in the cerebrospinal fluid are low, but folate levels in the serum and erythrocytes are normal. We examined serum specimens from 28 children with cerebral folate deficiency, 5 of their mothers, 28 age-matched control subjects, and 41 patients with an unrelated neurologic disorder. Serum from 25 of the 28 patients and 0 of 28 control subjects contained high-affinity blocking autoantibodies against membrane-bound folate receptors that are present on the choroid plexus. Oral folinic acid normalized 5MTHF levels in the cerebrospinal fluid and led to clinical improvement. Cerebral folate deficiency is a disorder in which autoantibodies can prevent the transfer of folate from the plasma to the cerebrospinal fluid. Copyright 2005 Massachusetts Medical Society.

ANSWER 3 OF 7 MEDLINE on STN DUPLICATE 3

ACCESSION NUMBER: 2004014907 MEDLINE DOCUMENT NUMBER: PubMed ID: 14711912

Autoantibodies against folate TITLE:

receptors in women with a pregnancy complicated by

a neural-tube defect.

Rothenberg Sheldon P; da Costa Maria P; Sequeira Jeffrey M; AUTHOR:

Cracco Joan; Roberts Jaclyn L; Weedon Jeremy; Quadros

Edward V

CORPORATE SOURCE: Department of Medicine, State University of New York

Downstate Medical Center, Brooklyn 11203, USA..

srothenberg@downstate.edu

SOURCE: The New England journal of medicine, (2004 Jan 8) Vol. 350,

No. 2, pp. 134-42.

Journal code: 0255562. E-ISSN: 1533-4406.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE) (RESEARCH SUPPORT, NON-U.S. GOV'T)

LANGUAGE: English

FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals

ENTRY MONTH: 200401

ENTRY DATE: Entered STN: 9 Jan 2004

> Last Updated on STN: 17 Jan 2004 Entered Medline: 16 Jan 2004

BACKGROUND: In the absence of clinical folate deficiency, periconceptional AΒ supplementation with folic acid reduces a woman's risk of having an infant with a neural-tube defect. Since antiserum to folate receptors induces embryo resorption and malformations in rats, we hypothesized that autoantibodies against folate receptors in women may be associated with pregnancy complicated by a neural-tube defect. METHODS: Serum from 12 women who were or had been pregnant with a fetus with a neural-tube defect and from 24 control women (20 with current or prior normal pregnancies and 4 who were nulligravid) was analyzed for autoantibodies by incubation with human placental folate receptors radiolabeled with [3H]folic acid. The properties of these autoantibodies were characterized by incubating serum and the autoantibodies isolated from serum

with placental membranes, ED27 cells, and KB cells, which express the

folate receptors. RESULTS: Serum from 9 of 12 women

with a current or previous affected pregnancy (index subjects) and 2 of 20 control subjects contained autoantibodies against folate receptors (P<0.001). The autoantibodies blocked the binding of [3H]folic acid to folate receptors on placental membranes and on ED27 and KB cells incubated at 4 degrees C and blocked the uptake of [3H]folic acid by KB cells when incubated at 37 degrees C. CONCLUSIONS: Serum from women with a pregnancy complicated by a neural-tube defect contains autoantibodies that bind to folate receptors and can block the cellular uptake of folate. Further study is warranted to assess whether the observed association between maternal autoantibodies against folate receptors and neural-tube defects reflects a causal relation.

Copyright 2004 Massachusetts Medical Society

ANSWER 4 OF 7 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

ACCESSION NUMBER: 2007:221688 BIOSIS PREV200700221969 DOCUMENT NUMBER:

TITLE: Could maternal autoantibodies against folate receptor-membrane proteins cause

spontaneous abortion or congenital heart defects?. AUTHOR(S): Neuman, Alan [Reprint Author]; Hernandez-Robles, Jose; Rothenberg, Sheldon; Hodge, Diana; Roczek, Aleksandra;

Mathias, Leigh; Lizarralde, Jose; Huhta, James Univ S Florida, Tampa, FL USA

CORPORATE SOURCE:

SOURCE: American Journal of Obstetrics and Gynecology, (DEC 2006)

> Vol. 195, No. 6, Suppl. S, pp. S229. Meeting Info.: 27th Annual Meeting of the

Society-of-Maternal-Fetal-Medicine. San Francisco, CA, USA.

February 05 -10, 2007. Soc Maternal Fetal Med.

CODEN: AJOGAH. ISSN: 0002-9378.

DOCUMENT TYPE: Conference; (Meeting)

Conference; Abstract; (Meeting Abstract)

LANGUAGE: English

ENTRY DATE: Entered STN: 4 Apr 2007

Last Updated on STN: 4 Apr 2007

ANSWER 5 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:1206350 CAPLUS

DOCUMENT NUMBER: 145:500132

TITLE: Prevention and therapy of cerebral folate deficiency

PATENT ASSIGNEE(S): Ramaekers, Vincent, Belg. SOURCE: PCT Int. Appl., 74pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent. English LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PAT | ENT : | | | KIN | D | DATE | | | APPLICATION NO. | | | | | DATE | | | | | |
|-----|-------|-------|-----|-----|-----|------|----------|-----|-----------------|---------------------------|-----|-----|-----|------|-----|----------|-----|--|--|
| WO | 2006 | 1195: | | | A2 | | 20061116 | | | WO 2006-BE45 | | | | | | 20060504 | | | |
| | W: | ΑE, | AG, | AL, | AM, | ΑT, | ΑU, | AZ, | BA, | BB, | BG, | BR, | BW, | BY, | BZ, | CA, | CH, | | |
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| | | KΖ, | LC, | LK, | LR, | LS, | LT, | LU, | LV, | LY, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | | |
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| | | IS, | ΙΤ, | LT, | LU, | LV, | MC, | NL, | PL, | PT, | RO, | SE, | SI, | SK, | TR, | BF, | ВJ, | | |
| | | CF, | CG, | CI, | CM, | GΑ, | GN, | GQ, | GW, | $\mathrm{ML}_{m{\prime}}$ | MR, | NE, | SN, | TD, | ΤG, | BW, | GH, | | |

GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: WO 2005-BE74 A 20050511

AB The present invention relates to methods and means to prevent cerebral folate deficiency (CFD) and/or to treat CFD at a very early stage, when CFD has not yet fully developed. It was found that circulating and blocking autoantibodies to folate receptor

(FR) represent one of the major causes of CFD and that prognosis improves the younger a child can be treated. The invention as such in particular relates to a method of screening infants and their mothers for the presence of circulating autoantibodies in their serum and/or for low 5-methyltetrahydrofolate (5MTHF) CSF levels, followed by a prompt treatment of a subject in need thereof with a folate supplement in case the testing procedure is pos. Such screening should also be performed for all children or any other subjects as soon as at least 3 of the major criteria of CFD manifest. It was further found that the addition of antioxidants to a folate supplement maintains stability of (5MTHF) and can help restore an impaired 5MTHF uptake in the nervous system due to the circulation of blocking autoantibodies. Avoidance of foods and products, containing proteins with similar amino acid sequences as compared to human FRs, is strongly preferred in the preparation of compds. or food products for the prevention and/or treatment of CFD. The methods and means of the invention have a major impact on the health of the population and can help to reduce the incidence of for instance autism and schizophrenia related to CFD.

L5 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:513611 CAPLUS

DOCUMENT NUMBER: 145:26550

TITLE: Immunoassay for detection of autoantibodies to folate

binding protein

INVENTOR(S): Cabrera, Robert M.; Finnell, Richard PATENT ASSIGNEE(S): The Texas A & M University System, USA

SOURCE: PCT Int. Appl., 25 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND DATE | APPLICATION NO. | DATE | | |
|--------------------------------------|-------------------------------|---|------------------------|--|--|
| WO 2006058287 WO 2006058287 | A2 20060601
A3 20061019 | WO 2005-US42906 | 20051128 | | |
| W: AE, AG, AL, | AM, AT, AU, AZ, | BA, BB, BG, BR, BW, BY, | | | |
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| US 2006115860
PRITY APPLN. INFO.: | A1 20060601 | US 2005-288014
US 2004-631130P | 20051128
P 20041126 | | |

PRIORITY APPLN. INFO.:

US 2004-631130P P 20041126

AB The present invention is directed to an assay that detects

autoantibodies to folate receptor and can be used in the clin. diagnostic testing of these antibodies in humans. The assay described herein has several features that offer advantages over the

existing methods. Some of these features include adaptability to high-throughput processing, the use of an Ig antibody to bind autoantibodies bound to folate receptor or the use of enzyme-labeled folic acid to bind folate binding protein and use of fluorescence or chemiluminescence for detection. Using an ELISA-based assay, the disclosed invention demonstrated that folate-binding proteins from human, mouse, and cow could be used as probes fro folate-binding proteins autoantibodies. This assay thereby avoids the use of radioactivity and can be automated and scaled to process hundreds of samples safely and simultaneously. The present invention is also directed to a diagnostic kit to detect autoantibodies to the folate receptor in serum from an individual. Serum samples are obtained from women during mid-gestational pregnancy carrying fetuses suspected of having neural tube defects, and the samples are tested to identify the presence, absence, and relative abundance of folate-binding protein autoantibodies.

L5 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:430678 CAPLUS

DOCUMENT NUMBER: 140:422391

TITLE: Assay for autoantibodies to folate

receptors

INVENTOR(S): Rothenberg, Sheldon P.; Da Costa, Maria; Sequeira,

Jeffrey

PATENT ASSIGNEE(S): USA

SOURCE: PCT Int. Appl., 60 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| | PA: | PATENT NO. | | | | | | DATE | | | APPLICATION NO. | | | | | DATE | | | |
|------|----------------------------|------------|--|--|--|--|--|---|---|---|---|---|---|---|---|---|--|--|----|
| | | 2004 | | | | | | WO 2003-US35690 | | | | | 20031107 | | | | | | |
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| | EP | 1558 | 286 | | | A2 | | 2005 | 0803 | | EP 2 | 003- | 7687 | 95 | | 2 | 0031 | 107 | |
| | | R: | | | | | | | FR,
MK, | | | | | | | | | PT, | |
| | | 2006 | 5215 | 32 | , | T | · | 2006 | 0921 | · | JP 2 | 004- | 5519 | 56 | · | 2 | 0031 | | |
| PRIO | RIORITY APPLN. INFO.: | | | | | | | | | US 2002-424965P | | | |] | | | | | |
| 7\ D | WO 2003-US35690 W 20031107 | | | | | | | | | | | | | | | | | | |

AB The present invention identifies autoantibodies to folate receptors. Methods to identify these autoantibodies to the human folate receptors are also provided. The present invention also contemplates diagnostic methods and test kits to be used in a clin. setting for identifying a subject at risk of folate-sensitive abnormalities or disorders as observed in neural tube defect complicated pregnancies. In addition, infertility,

spontaneous abortion, male sterility, unsuccessful in vitro fertilization, neurol. disorders and impaired folate absorption may also be associated with these autoantibodies to folate receptors.

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NEWS 4 JUL 02 CHEMCATS accession numbers revised
NEWS 5 JUL 02 CA/CAplus enhanced with utility model patents from China
NEWS 6 JUL 16 CAplus enhanced with French and German abstracts
NEWS 7 JUL 18 CA/CAplus patent coverage enhanced
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         AUG 20
                CA/CAplus enhanced with CAS indexing in pre-1907 records
NEWS 14
                 Full-text patent databases enhanced with predefined
                 patent family display formats from INPADOCDB
NEWS 15 AUG 27
                USPATOLD now available on STN
NEWS 16 AUG 28 CAS REGISTRY enhanced with additional experimental
                 spectral property data
NEWS 17 SEP 07 STN AnaVist, Version 2.0, now available with Derwent
                 World Patents Index
NEWS 18
         SEP 13
                 FORIS renamed to SOFIS
         SEP 13
NEWS 19
                 INPADOCDB enhanced with monthly SDI frequency
         SEP 17
                 CA/CAplus enhanced with printed CA page images from
NEWS 20
                 1967-1998
NEWS 21
         SEP 17
                CAplus coverage extended to include traditional medicine
                 patents
NEWS 22
         SEP 24
                 EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS 23
                 CA/CAplus enhanced with pre-1907 records from Chemisches
         OCT 02
                 Zentralblatt
NEWS 24 OCT 19
                 BEILSTEIN updated with new compounds
NEWS EXPRESS
             19 SEPTEMBER 2007: CURRENT WINDOWS VERSION IS V8.2,
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CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 19 SEPTEMBER 2007.

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=> File .Gerry2MBCE
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

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LOGINID:SSPTAEGS1646

PASSWORD:

* * * * * RECONNECTED TO STN INTERNATIONAL * * * * * * SESSION RESUMED IN FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE' AT 12:43:23 ON 12 NOV 2007

FILE 'MEDLINE' ENTERED AT 12:43:23 ON 12 NOV 2007

FILE 'BIOSIS' ENTERED AT 12:43:23 ON 12 NOV 2007

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ENTRY SESSION
FULL ESTIMATED COST
3.26
3.47

- => S Autoantibody (S)detect? (S) Method AND @pd<=20021108
- '20021108' NOT A VALID FIELD CODE
- L1 0 AUTOANTIBODY (S) DETECT? (S) METHOD AND @PD<=20021108
- => S Autoantibody (S)detect? (S) Method AND pd<=20021108
 - 2 FILES SEARCHED...
- L2 633 AUTOANTIBODY (S) DETECT? (S) METHOD AND PD<=20021108
- => S Autoantibody (S)detect? (S) Method (S)receptor AND pd<=20021108 2 FILES SEARCHED...
- L3 38 AUTOANTIBODY (S) DETECT? (S) METHOD (S) RECEPTOR AND PD<=2002110
- => Dup Rem 13

PROCESSING COMPLETED FOR L3

L4 21 DUP REM L3 (17 DUPLICATES REMOVED)

ANSWERS '1-7' FROM FILE MEDLINE ANSWERS '8-9' FROM FILE BIOSIS ANSWERS '10-21' FROM FILE CAPLUS

=> D Ti 14 1-21

- L4 ANSWER 1 OF 21 MEDLINE on STN DUPLICATE 1
- TI Detection of functionally different types of pathological autoantibodies against thyrotropin receptor in Graves' patients sera by luminescent immunoprecipitation analysis.
- L4 ANSWER 2 OF 21 MEDLINE on STN DUPLICATE 2
- TI In vitro synthesized TSH receptor as a tool for autoantibody detection.
- L4 ANSWER 3 OF 21 MEDLINE on STN DUPLICATE 3
- TI Autoantibodies against integral membrane proteins of the nuclear envelope in patients with primary biliary cirrhosis.
- L4 ANSWER 4 OF 21 MEDLINE on STN DUPLICATE 4
- TI Autoantibodies against brain septal region antigens specific to unmedicated schizophrenia?.
- L4 ANSWER 5 OF 21 MEDLINE on STN DUPLICATE 5
- TI Myasthenia gravis: antibodies to extracellularly exposed antigenic determinants of acetylcholine receptor.
- L4 ANSWER 6 OF 21 MEDLINE on STN DUPLICATE 6
- TI Insulin-receptor autoantibody detected by the human placental membrane method: six patients with insulin-receptor autoantibody in japan.
- L4 ANSWER 7 OF 21 MEDLINE on STN DUPLICATE 8
- TI Direct method for detection and characterization of cell surface receptors for insulin by means of 125I-labeled autoantibodies against the insulin receptor.
- L4 ANSWER 8 OF 21 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN DUPLICATE 7 $\,$
- TI STUDIES ON INSULIN RECEPTOR AUTO ANTIBODIES USING THE HUMAN PLACENTAL MEMBRANE METHOD 6 INSULIN RECEPTOR ANTIBODY POSITIVE PATIENTS FOUND IN JAPAN.

- L4 ANSWER 9 OF 21 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN
- TI Methods of detecting disorders of the central nervous system by detecting autoantibodies which specifically bind ionotropic glutamate receptors.
- L4 ANSWER 10 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN
- TI Autoimmunity to angiotensin AT1 receptors in schizophrenia
- L4 ANSWER 11 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN
- TI Method for diagnosis and prognosis of epilepsy development in patients with preclinical stage involving fractal analysis of EEG and determination of paroxysmal activity test by detection of autoantibodies to quisqualate-binding membrane protein in blood
- L4 ANSWER 12 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN
- TI Clinical significance and assay of the autoantibodies against angiotensin II type 1-receptor and $\alpha 1$ -adrenergic receptor
- L4 ANSWER 13 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN
- TI Cancer detection method and reagents using autoantibodies produced by immortalized monocytes
- L4 ANSWER 14 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN
- TI Human thyrotropin receptor compositions and use thereof
- L4 ANSWER 15 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN
- ${\tt TI}$ Immunoassay and kit for detecting autoantibody against thyroid stimulating hormone receptor
- L4 ANSWER 16 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN
- TI Assays for TSH receptor autoantibodies
- L4 ANSWER 17 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN
- TI Method for production of purified, optionally radioiodinated TSH receptor preparations for use in diagnostics and therapy
- L4 ANSWER 18 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN
- TI Tumor suppressor
- L4 ANSWER 19 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN
- TI Detection of thyroidal autoantibodies
- L4 ANSWER 20 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN
- TI Detection of autoantibodies to the thyrotropin receptor
- L4 ANSWER 21 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN
- TI Methods of detecting and combating disorders of the central nervous system
- => Log Off H

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STN INTERNATIONAL SESSION SUSPENDED AT 12:50:24 ON 12 NOV 2007

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PASSWORD:
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SESSION RESUMED IN FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE'
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                                                      ENTRY
                                                               SESSION
FULL ESTIMATED COST
                                                      36.78
                                                                 36.99
=> D Hist
     (FILE 'HOME' ENTERED AT 11:40:20 ON 12 NOV 2007)
     FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE' ENTERED AT 11:40:40 ON 12 NOV 2007
L1
              0 S AUTOANTIBODY (S) DETECT? (S) METHOD AND @PD<=20021108
            633 S AUTOANTIBODY (S) DETECT? (S) METHOD AND PD<=20021108
L2
             38 S AUTOANTIBODY (S)DETECT? (S) METHOD (S)RECEPTOR AND PD<=20021
L3
             21 DUP REM L3 (17 DUPLICATES REMOVED)
L4
=> D ibib abs L4 1, 3-9, 11-17, 19-21
    ANSWER 1 OF 21
                        MEDLINE on STN
                                                        DUPLICATE 1
ACCESSION NUMBER: 2000385089
                                  MEDLINE
DOCUMENT NUMBER:
                    PubMed ID: 10826518
                    Detection of functionally different types of pathological
TITLE:
                    autoantibodies against thyrotropin receptor in Graves'
                    patients sera by luminescent immunoprecipitation analysis.
AUTHOR:
                    Minich W B; Loos U
CORPORATE SOURCE:
                    Department of Internal Medicine I, University of Ulm,
                    Germany.
SOURCE:
                    Experimental and clinical endocrinology & diabetes :
                    official journal, German Society of Endocrinology [and]
                    German Diabetes Association, (2000) Vol. 108, No.
                    2, pp. 110-9.
                    Journal code: 9505926. ISSN: 0947-7349.
PUB. COUNTRY:
                    GERMANY: Germany, Federal Republic of
DOCUMENT TYPE:
                    Journal; Article; (JOURNAL ARTICLE)
                    (RESEARCH SUPPORT, NON-U.S. GOV'T)
LANGUAGE:
                    English
FILE SEGMENT:
                    Priority Journals
ENTRY MONTH:
                    200008
ENTRY DATE:
                    Entered STN: 18 Aug 2000
                    Last Updated on STN: 18 Aug 2000
                    Entered Medline: 10 Aug 2000
AΒ
     We describe a new method for the detection of
     different types of pathological autoantibodies against TSH
     receptor (TSHR) in Graves' patients sera by luminescent
     immunoprecipitation analysis. For this purpose three different chimeras
     composed of human TSHR and rat luteotropin/choriogonadotropin receptor
     (LH-CGR) were constructed, as was described previously (Tahara K, Ishikawa
     N, Yamamoto K, Hirai A, Ito K, Tamura Y, Yoshida S, Saito Y, Kohn LD. 1997
     Thyroid 7:867-877). They were used in the immunoprecipitation reactions:
     (i) the wild type TSHR (for the detection of total TSHR autoantibodies),
```

(ii) TSHR/LH-CGR chimera wherein TSHR amino acid residues 8-165 (epitopes for thyroid stimulating antibodies) are replaced by comparable LH-CGR

residues, (iii) TSHR/LH-CGR chimera wherein TSHR amino acids 261-370 (epitopes for thyroid blocking antibodies) are replaced by comparable LH-CGR residues, and (iv) TSHR/LH-CGR chimera wherein TSHR amino acids 8-165 and 261-370 are replaced by comparable LH-CGR residues (for the detection of neutral TSHR autoantibodies). DNA encoding the N-terminal 725 (of 764) amino acids of wild type TSHR (or TSHR/LH-CGR chimera) was fused to the cDNA for the 550-amino acid firefly luciferase. The hybrid proteins were produced in HeLa cells using recombinant vaccinia viruses. All fusion proteins retained the enzymatic activity of firefly luciferase and TSHR-LUC interacted with TSH with the same affinity as wild type receptor. The luciferase tagged TSHR and TSHR/LH-CGR chimeras were used for the detection of different types of TSHR autoantibodies (i.e. total, neutral, thyroid stimulating and thyroid blocking) in 63 Graves' disease and 62 normal sera by immunoprecipitation analysis. The data demonstrated positive correlation between results of immunoprecipitation assay and results obtained using cAMP bioassay or assay for TSH binding inhibitory immunoglobulins in test sera.

L4 ANSWER 3 OF 21 MEDLINE on STN DUPLICATE 3

ACCESSION NUMBER: 94102477 MEDLINE DOCUMENT NUMBER: PubMed ID: 8276182

TITLE: Autoantibodies against integral membrane proteins of the

nuclear envelope in patients with primary biliary

cirrhosis.

AUTHOR: Nickowitz R E; Wozniak R W; Schaffner F; Worman H J

CORPORATE SOURCE: Department of Medicine, Mount Sinai School of Medicine, New

York, New York.

SOURCE: Gastroenterology, (1994 Jan) Vol. 106, No. 1, pp.

193-9.

Journal code: 0374630. ISSN: 0016-5085.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

(RESEARCH SUPPORT, NON-U.S. GOV'T)

LANGUAGE: English

FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals

ENTRY MONTH: 199402

ENTRY DATE: Entered STN: 18 Feb 1994

Last Updated on STN: 18 Feb 1994

Entered Medline: 7 Feb 1994

AΒ BACKGROUND/AIMS: Autoantibodies against nuclear membrane proteins have been identified in patients with primary biliary cirrhosis (PBC). The aim of the present study was to determine the incidence of these autoantibodies in patients with PBC and examine their significance. METHODS: An assay using recombinant polypeptides was designed to unequivocally detect autoantibodies against gp210 and the lamin B receptor, integral proteins of the nuclear membranes. RESULTS: Autoantibodies against gp210 were detected in 15 of 159 patients with PBC and 0 of 46 controls. Autoantibodies against lamin B receptor were detected in 2 patients with PBC and 0 controls. The presence of these autoantibodies had a sensitivity of 11% and specificity of 100% for the diagnosis of PBC. Autoantibodies against gp210 were present in 4 of 19 (21%) patients with PBC who did not have detectable antimitochondrial antibodies. Patients with PBC and gp210 autoantibodies had a higher incidence of associated arthritis. CONCLUSIONS: Autoantibodies against gp210 and the lamin B receptor are present in approximately 10% of patients with PBC. These autoantibodies are highly specific for the diagnosis of PBC and may be useful in diagnosing individuals without antimitochondrial antibodies and in identifying a subgroup of patients with an increased incidence of associated arthritis.

DOCUMENT NUMBER: PubMed ID: 2223917

TITLE: Autoantibodies against brain septal region antigens

specific to unmedicated schizophrenia?.

AUTHOR: Knight J G; Knight A; Menkes D B; Mullen P E

CORPORATE SOURCE: Department of Psychological Medicine, University of Otago

Medical School, Dunedin, New Zealand.

SOURCE: Biological psychiatry, (1990 Sep 15) Vol. 28, No.

6, pp. 467-74.

Journal code: 0213264. ISSN: 0006-3223.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE) (RESEARCH SUPPORT, NON-U.S. GOV'T)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199012

ENTRY DATE: Entered STN: 8 Feb 1991

Last Updated on STN: 8 Feb 1991 Entered Medline: 7 Dec 1990

AB Health et al. (1989) reported that serum from 96% of unmedicated schizophrenic patients contained IgG autoantibodies specific for the septal region of rhesus monkey brain, compared with 0% of nonschizophrenic control subjects and 6% of schizophrenic patients who were on neuroleptic medication. Using the same technique of crossed immunoelectrophoresis, we have tried to replicate this finding. In contrast to the original report, we observed "positive" precipitin arcs with IgG concentrates from all 14 serum samples tested. The failure of immunoelectrophoretic methods to provide convincing evidence of pathogenic autoantibodies in schizophrenia in no way detracts from the hypothesis that autoimmune processes are involved in some forms of schizophrenia. Such methods have not proved useful in established autoimmune diseases such as Graves' disease and myasthenia gravis in which the pathogenic autoantibodies against cell-surface receptors can only be detected by assays which measure functional interactions with such receptors

L4 ANSWER 5 OF 21 MEDLINE on STN DUPLICATE 5

ACCESSION NUMBER: 87015278 MEDLINE DOCUMENT NUMBER: PubMed ID: 2429233

TITLE: Myasthenia gravis: antibodies to extracellularly exposed

antigenic determinants of acetylcholine receptor.

AUTHOR: Oda K; Shibasaki H

SOURCE: Neurology, (1986 Oct) Vol. 36, No. 10, pp.

1374-7.

Journal code: 0401060. ISSN: 0028-3878.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE) (RESEARCH SUPPORT, NON-U.S. GOV'T)

related to the acceleration of AChR degradation.

LANGUAGE: English

FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals

ENTRY MONTH: 198611

ENTRY DATE: Entered STN: 2 Mar 1990

Last Updated on STN: 2 Mar 1990 Entered Medline: 3 Nov 1986

AB We have used a simple method to detect autoantibodies that react with extracellularly exposed antigenic determinants of acetylcholine receptor (AChR) of cultured rat muscle. Immunoglobulins from 30 patients with myasthenia gravis contained antibodies to detergent-solubilized AChR and bound to extracellularly exposed AChR. The antibody titer with solubilized rat AChR did not correlate with clinical severity, but ability of antibody to bind to extracellularly exposed AChR did correlate well and was also closely

L4 ANSWER 6 OF 21 MEDLINE on STN DUPLICATE 6

ACCESSION NUMBER: 83121025 MEDLINE DOCUMENT NUMBER: PubMed ID: 6760461

TITLE: Insulin-receptor autoantibody

detected by the human placental membrane
method: six patients with insulin-receptor

autoantibody in japan.

AUTHOR: Omori Y; Minei S; Saito M; Hirata Y

SOURCE: The Tohoku journal of experimental medicine, (1982

Nov) Vol. 138, No. 3, pp. 319-28.

Journal code: 0417355. ISSN: 0040-8727.

PUB. COUNTRY: Japan

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 198303

ENTRY DATE: Entered STN: 18 Mar 1990

Last Updated on STN: 3 Mar 2000 Entered Medline: 11 Mar 1983

AΒ Insulin-receptor antibodies were detected in six patients out of 61 diabetics from all over Japan during 1975 to 1979 using the human placental membrane method. These 61 patients were divided into three categories: (1) Those whose diabetes control needed more than 80 units of insulin a day; (2) those whose fasting IRI was higher than 50 microU/ml even with glucose intolerance; and (3) those who had hypoglycemia of unknown origin. Controls consisted of 11 serum samples from 11 healthy women and six diabetics treated with insulin and thus having insulin antibodies in their sera. The sera from healthy subjects did not suppress 125I-insulin binding with human placental membrane in either the direct or the preincubation method. 125I-insulin binding in the direct method was markedly suppressed, however, by the sera of insulin-treated diabetics, although no such suppression was observed with the preincubation method. In six of the 61 subjects (two males and four females), inhibition of binding was proved by both direct and preincubation methods for the protein fraction of the sera, particularly for the IgG fraction in five cases. Three of the six had Sjogren syndrome; one of these also had acanthosis nigricans. Four of the six showed insulin resistance, and two did not. A follow-up showed that antibodies decreased relatively quickly in three of the six cases, with the degree of inhibition paralleling patients' clinical courses.

L4 ANSWER 7 OF 21 MEDLINE on STN DUPLICATE 8

ACCESSION NUMBER: 77058077 MEDLINE DOCUMENT NUMBER: PubMed ID: 1069300

TITLE: Direct method for detection and

characterization of cell surface receptors for insulin by means of 125I-labeled autoantibodies

against the insulin receptor.

AUTHOR: Jarrett D B; Roth J; Kahn C R; Flier J S

SOURCE: Proceedings of the National Academy of Sciences of the

United States of America, (1976 Nov) Vol. 73, No.

11, pp. 4115-9.

Journal code: 7505876. ISSN: 0027-8424.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 197701

ENTRY DATE: Entered STN: 13 Mar 1990

Last Updated on STN: 3 Mar 2000 Entered Medline: 29 Jan 1977

Autoantibodies directed against the cell surface receptors for insulin are AΒ found in some patients with extreme insulin resistance. These antibodies specifically inhibit the binding of insulin to its receptor. A purified IgG fraction from one patient's plasma was labeled with 1251. The 125I-labeled antireceptor antibody, which initially represented about 0.3% of the total 125I-IqG, was enriched by selective adsorption and subsequent elution from cells rich in insulin receptors. The 125I-antireceptor antibody bound to cells and the binding was inhibited by whole plasma and purified IgG from this patient, as well as whole plasma from another patient with autoantibodies to the insulin receptor. Insulins that differed 300-fold in biological potency and affinity inhibited binding of 125I-antireceptor antibody in direct proportion to their ability to bind to the insulin receptor. The binding of 125I-antireceptor antibody was closely correlated with the binding of 125I-insulin over a wide range of receptor concentrations on different cell types. Experimentally induced reduction of the insulin receptor concentration was associated with parallel decreases in the binding of 125I-antireceptor antibody and 125I-insulin. The preparation of 125I-antireceptor antibody with a high specific activity by cytoadsorption and elution has provided a sensitive method for the detection of receptors and autoantibodies to cell surface components.

L4 ANSWER 8 OF 21 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

DUPLICATE 7

ACCESSION NUMBER: 1981:182767 BIOSIS

DOCUMENT NUMBER: PREV198171052759; BA71:52759

TITLE: STUDIES ON INSULIN RECEPTOR AUTO ANTIBODIES USING THE HUMAN

PLACENTAL MEMBRANE METHOD 6 INSULIN RECEPTOR ANTIBODY

POSITIVE PATIENTS FOUND IN JAPAN.

AUTHOR(S): OMORI Y [Reprint author]; MINEI S; HIRATA Y; TAKEI M CORPORATE SOURCE: DIABETES CENT, TOKYO WOMEN'S MED COLL, TOKYO, JPN

SOURCE: Journal of the Japan Diabetes Society, (1980)

Vol. 23, No. 8, pp. 769-778. CODEN: TONYA4. ISSN: 0021-437X.

DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: JAPANESE

Insulin-receptor autoantibodies among patients with insulin resistance were reported. Insulin-receptor autoantibodies were detected by using the human placental membrane method described previously. The 61 cases were divided into 3 groups: those whose diabetes control needed > 80 U insulin/day; those whose fasting immunoreactive insulin was > 50 $\mu\text{U/ml}$ even with glucose intolerance; and those who had idiopathic hypoglycemia. Serum samples from 11 healthy women and 6 diabetics treated with insulin, and thus having insulin antibodies in their serum, were used as controls. The binding of 125I-insulin with human placental membranes was not suppressed by either the direct or preincubation methods on adding the serum of healthy subjects. The direct method represents a way of simultaneously incubating 125I-insulin, membrane and patient serum. The preincubation method represents a way to incubate 125I-insulin and pre-washed membrane after 1 day of preincubation of the membrane with patient serum. The binding of 125I-insulin by the direct method was markedly suppressed by the serum of the insulin-treated diabetics, while such suppression was not observed by the preincubation method. In 6 patients (2 males and 4 females) among the 61, inhibition of the binding of 125I-insulin with the membranes was shown by both the direct and preincubation methods. Evidence of the inhibition was found in the protein fraction of the serum from these 6 patients, particularly in the IgG fraction of 4. Of the 6 patients, 3 had the Sjogren syndrome, with 1 of these also having acanthosis nigricans. Of the 6 patients, 4 showed insulin resistance, while 1 of the remaining 2 had spontaneous hypoglycemia. A follow-up check revealed that, in 3 of

the 6 cases, the antibodies decreased relatively quickly, paralleling the degree of inhibition of the binding action and occurrence of hypoglycemic attacks. The existence of patients with insulin receptor antibodies but without insulin resistance is demonstrated, as evidenced by the 6 patients identified through the human placental membrane method.

L4 ANSWER 9 OF 21 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

ACCESSION NUMBER: 2002:45143 BIOSIS DOCUMENT NUMBER: PREV200200045143

TITLE: Methods of detecting disorders of the central nervous system by detecting

autoantibodies which specifically bind ionotropic

glutamate receptors.

AUTHOR(S): Rogers, S. W. [Inventor]; McNamara, J. O. [Inventor];

Heinemann, S. F. [Inventor] Salt Lake City, Utah, USA

ASSIGNEE: DUKE UNIVERSITY; THE SALK INSTITUTE FOR

BIOLOGICAL STUDIES

PATENT INFORMATION: US 5529898 19960625

SOURCE: Official Gazette of the United States Patent and Trademark

Office Patents, (June 25, 1996) Vol. 1187, No. 4,

pp. 2803-2804. print.

CODEN: OGUPE7. ISSN: 0098-1133.

DOCUMENT TYPE: Patent LANGUAGE: English

CORPORATE SOURCE:

ENTRY DATE: Entered STN: 2 Jan 2002

Last Updated on STN: 25 Feb 2002

L4 ANSWER 11 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:82656 CAPLUS

DOCUMENT NUMBER: 138:219706

TITLE: Method for diagnosis and prognosis of epilepsy

development in patients with preclinical stage

involving fractal analysis of EEG and determination of

paroxysmal activity test by detection of

autoantibodies to quisqualate-binding membrane protein

in blood

INVENTOR(S): Gromov, S. A.; Khorshev, S. K.; Korsakova, E. A. PATENT ASSIGNEE(S): Sankt-Peterburgskii Nauchno-Issledovatel'skii

Psikhonevrologicheskii Institut, Russia

SOURCE: Russ., No pp. given

CODEN: RUXXE7

DOCUMENT TYPE: Patent LANGUAGE: Russian

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--------------------------------------|------|----------|----------------------------------|------------------------|
| | | | | |
| RU 2188575
PRIORITY APPLN. INFO.: | C1 | 20020910 | RU 2001-104475
RU 2001-104475 | 20010220 <
20010220 |

AB A method for diagnosis and prognosis of epilepsy development in patients with preclin. stage involving fractal anal. of EEG and the determination of paroxysmal activity test by the detection of autoantibodies to quisqualate-binding membrane protein in the blood is presented. Epileptization index (EI) is calculated from formula: EI = PAT x D, where PAT is the paroxysmal activity test, and D is the fractal dimensionality value obtained by fractal anal. of EEG. At an EI value of 132.54±5.32, clin. stage of epilepsy is diagnosed. At an EI value of 45.05±3.31, the absence of epilepsy is stated. At an EI value of 45.05±3.31 - 132.54±5.32, preclin. stage of epilepsy is diagnosed. At an D>0.70, PAT>150, and EI>105, antiepileptic therapy is started to prevent the

development of clin. stage of epilepsy.

L4 ANSWER 12 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:680663 CAPLUS

DOCUMENT NUMBER: 140:161959

TITLE: Clinical significance and assay of the autoantibodies

against angiotensin II type 1-receptor and

 α 1-adrenergic receptor

AUTHOR(S): Wang, Min; Wei, Yumiao; Liao, Yuhua

CORPORATE SOURCE: Tongji Medical College, Huazhong University of Science

& Technology, Wuhan, 430022, Peop. Rep. China Zhonghua Jianyan Yixue Zazhi (2002), 25(4),

226-228

CODEN: ZJYZAP; ISSN: 1009-9158

PUBLISHER: Zhonghua Yixuehui Zazhishe

DOCUMENT TYPE: Journal LANGUAGE: Chinese

SOURCE:

The method of screening the autoantibodies against angiotensin II type 1-receptor (AT1-receptor) and α 1-adrenergic receptor was established by ELISA and the relation between the autoantibodies and hypertension was evaluated. The epitope of the extracellular loops of AT1-receptor (amino acid sequence from 165 to 191) and of α 1-adrenergic receptor (amino acid sequence from 192 to 218) were synthesized and used as antigens to screen the autoantibodies by ELISA. The autoantibodies were assayed in 98 patients with hypertension uncontrolled, 96 patients with hypertension controlled and 40 normotensives. The intra- and inter-assay CVs were 0.066, 0.072 and 0.097, 0.101, resp. in the autoantibody pos. control group; after absorbed by antigen, the absorbency (A) decreased by 2.5 and 2.3 folds, resp. In 98 patients, there were 41 patients (41.8%) with autoantibodies against AT1-receptor pos., 36 patients (36.7%) with against $\alpha 1-$ adrenergic receptor pos. The pos. rate of autoantibodies was significantly higher in the uncontrolled hypertension group than that in controlled hypertension group (10.42% and 13.54%) and normotensives group (7.5% and 5%), all. The study suggests that ELISA is a simple, specific and sensitive method to detect the autoantibodies against AT1-receptor and α 1-adrenergic receptor, which is useful for monitoring the patients with hypertension.

L4 ANSWER 13 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2000:402103 CAPLUS

DOCUMENT NUMBER: 133:40237

TITLE: Cancer detection method and reagents using

autoantibodies produced by immortalized monocytes Robertson, John Russell; Graves, Catherine Rosamund

Louise; Price, Michael Rawling
S): The University of Nottingham, UK

PATENT ASSIGNEE(S): The University of Notting

SOURCE: PCT Int. Appl., 41 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

INVENTOR(S):

| PATENT NO. | | | | | KIND DATE | | | | APPLICATION NO. | | | | | DATE | | |
|---------------|-----|-----|-----|-----|-----------|------|------|-----|-----------------|-----|-----|-----|-----|------------|-----|-----|
| | | | | | | | | | | | | | | | | |
| WO 2000034787 | | | | A1 | | 2000 | 0615 | | WO 1999-GB4182 | | | | | 19991210 < | | |
| W: | ΑE, | AL, | AM, | ΑT, | ΑU, | ΑZ, | ΒA, | BB, | BG, | BR, | BY, | CA, | CH, | CN, | CR, | CU, |
| | CZ, | DE, | DK, | DM, | EE, | ES, | FI, | GB, | GD, | GE, | GH, | GM, | HR, | HU, | ID, | IL, |
| | IN, | IS, | JP, | ΚE, | KG, | KP, | KR, | KΖ, | LC, | LK, | LR, | LS, | LT, | LU, | LV, | MA, |
| | MD, | MG, | MK, | MN, | MW, | MX, | NO, | NΖ, | PL, | PT, | RO, | RU, | SD, | SE, | SG, | SI, |
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    CA 2354702
                        A1 20000615 CA 1999-2354702
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            IE, SI, LT, LV, FI, RO, CY
    JP 2002532686 T 20021002
                                         JP 2000-587190
                                                                 19991210 <--
    AT 322014
                              20060415 AT 1999-959578
                        T3 20060716 ES 1999-959578
T 20060831 PT 1999-959578
    ES 2257087
                                                                19991210
    PT 1137943
                                                                19991210
    US 7205117
                                          US 2001-857739
                       B1 20070417
                                                                 20010608
                                          GB 1998-27228 A 19981210
WO 1999-GB4182 W 19991210
PRIORITY APPLN. INFO.:
    Sensitive and specific methods are provided for use in detecting the
AB
    presence of cancer marker proteins in the body fluids of a mammal. Also
    provided are autoantibodies for use in these methods, and immortalized
    cells which are a source of the autoantibodies. Serum samples were
    assayed by ELISA using immobilized autoantibodies produced by B
    lymphocytes derived from patients with breast cancer. The assay had high
    sensitivity for cancer-associated forms of MUC1 protein.
                        6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS
REFERENCE COUNT:
                              RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
    ANSWER 14 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:84955 CAPLUS
DOCUMENT NUMBER:
                        132:117962
TITLE:
                       Human thyrotropin receptor compositions and use
                        thereof
INVENTOR(S):
                       Rapoport, Basil; Mclachlan, Sandra M.
                    USA
PATENT ASSIGNEE(S):
SOURCE:
                       PCT Int. Appl., 179 pp.
                        CODEN: PIXXD2
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
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    WO 2000005345 A1 20000203 WO 1999-US16636 19990721 <--
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            MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
            TM, TR, TT
        RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
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                       A1 20000214 AU 1999-51245
    AU 9951245
                                                                 19990721 <--
                                           US 1998-93533P
PRIORITY APPLN. INFO.:
                                                             P 19980721
                                           WO 1999-US16636 W 19990721
    TSHR compns. and methods of use are disclosed, useful for diagnostic and
AΒ
    therapeutic purposes. Recombinant nucleic acid sequences encoding a
    secreted, soluble, complex carbohydrate-containing form of the TSHR ectodomain,
    in a replicatable vector is claimed as are the expressed polypeptides.
    The TSHR ectodomain is C-terminal truncated and is selected from the group
    consisting of TSHR-261 through TSHR-309. The polypeptide can addnl.
    comprise histidine residues at its carboxyl terminus. A host cell
    comprising the recombinant nucleic acid sequence of the invention and a
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method of producing the TSHR ectodomain using the host cells are also

claimed. Antibodies against the polypeptides of the invention are claimed. Improvement to the TSH binding inhibition assay using host cells and polypeptides of the invention is claimed. A method is claimed of detecting directly, by flow cytometry, binding of autoantibodies in a patient's serum to native TSHR, comprising use in a flow cytometric assay of a Chinese Hamster Ovary cell line which over-expresses the TSHR holoreceptor. A method is claimed of directly detecting human autoantibodies against human TSHR in a biol. fluid sample comprising incubating a biol. fluid sample in the presence of a solid support comprising a capture ligand capable of binding said autoantibodies, washing said solid support to remove unbound material, incubating said solid support comprising said autoantibodies bound thereto in the presence of a secreted, soluble, complex carbohydrate-containing form of the TSHR ectodomain, washing said solid support to remove unbound material, and detecting said secreted, soluble, complex carbohydrate-containing form of the TSHR ectodomain bound to said autoantibodies bound to said solid support, thereby directly detecting human autoantibodies against human TSHR in said biol. fluid sample.

L4 ANSWER 15 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2000:254616 CAPLUS

DOCUMENT NUMBER: 132:289226

TITLE: Immunoassay and kit for detecting autoantibody against

thyroid stimulating hormone receptor

INVENTOR(S):
Watanabe, Yukihiko

PATENT ASSIGNEE(S): Cosmic Corporation K. K., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|------------|
| | | | | |
| JP 2000111559 | A | 20000421 | JP 1998-282717 | 19981005 < |
| PRIORITY APPLN. INFO.: | | | JP 1998-282717 | 19981005 |

AB Provided is a highly sensitive immunoassay method for

detecting TSH receptor-specific autoantibody.

The immunoassay uses 125I-labeled TSH and soluble TSH receptor in the presence of water soluble polymer (e.g. polyethylene glycol or dextran) for detecting TSH receptor-specific autoantibody and for diagnosing Basedow's disease.

L4 ANSWER 16 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1999:796053 CAPLUS

DOCUMENT NUMBER: 132:34772

TITLE: Assays for TSH receptor autoantibodies

INVENTOR(S): Sanders, Jane; Smith, Bernard Rees; Furmaniak, Jadwiga

PATENT ASSIGNEE(S): Rsr Ltd., UK

SOURCE: PCT Int. Appl., 25 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|----------|-----------------|------------|
| | | | | |
| WO 9964865 | A1 | 19991216 | WO 1999-GB1774 | 19990604 < |

W: JP, US

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,

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PT, SE
     EP 1021721 A1 20000726 EP 1999-925202 EP 1021721 B1 20060809
                                                                       19990604 <--
         R: AT, CH, DE, ES, FR, GB, IT, LI
     AT 336002 T 20060915 AT 1999-925202 19990604
ES 2270601 T3 20070401 ES 1999-925202 19990604
US 6844162 B1 20050118 US 2000-494751 20000131
RITY APPLN. INFO:: GB 1998-12146 A 19980606
                                              GB 1998-12146
PRIORITY APPLN. INFO.:
                                              GB 1999-9661
                                                                  A 19990428
                                               WO 1999-GB1774
                                                                  W 19990604
     A method of monitoring autoantibodies to TSH (TSH)
AB
     receptor in a sample of body fluid, comprising the steps of: (a)
     incubating TSH receptor with a sample of body fluid; (b)
     reacting the incubated sample of body fluid with at least one binding
     agent which is capable of binding to the TSH receptor in
     competitive reaction with TSH receptor autoantibodies
     (TRAb), or in a case where TSH receptor is complexed to labeled
     antibody, reacting the sample of body fluid with at least one binding
     agent which can bind to TRAb in such way as not substantially to interfere
     with binding of the TRAb to the TSH receptor; and (c)
     detecting bound TRAb in the reacted incubated sample of body
     fluid. Thus, mol. cloning of TSH receptor cDNA was performed, recombinant
     porcine TSHR protein was expressed and used for preparation of monoclonal
     anti-TSHR antibody (4E31, IgG), immobilized 4E31 and 123I-labeled TSH-TSH
     receptor complex were prepared for detecting autoantibody in sera of
     patients with Graves' disease. ENCE COUNT: 2 THER
REFERENCE COUNT:
                                 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS
                                 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L4 ANSWER 17 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:451500 CAPLUS
DOCUMENT NUMBER:
                         131:83467
TITLE:
                         Method for production of purified, optionally
                         radioiodinated TSH receptor preparations for use in
                         diagnostics and therapy
INVENTOR(S): Loos, Ulrich; Minich, Waldemar B.
PATENT ASSIGNEE(S): B.R.A.H.M.S Diagnostica G.m.b.H., Germany
SOURCE:
                         Ger. Offen., 8 pp.
                          CODEN: GWXXBX
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                          German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
     PATENT NO. KIND DATE APPLICATION NO. DATE
     DE 19801154 A1 19990715 DE 1998-19801154 19980114 <---
WO 9936552 A1 19990722 WO 1999-EP158 19990113 <--
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         RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE
     EP 972055
                 A1 20000119
B1 20060510
                                             EP 1999-901597
                                                                       19990113 <--
     EP 972055
         R: AT, BE, CH, DE, FR, IT, LI
JP 2001523115 T 20011120
AT 325879 T 20060615
PRIORITY APPLN. INFO.:
                                            JP 1999-536734
AT 1999-901597
                                                                       19990113 <--
```

A recombinant human TSH receptor is produced in which the TSH receptor AB sequence is fused, via a cleavable intermediate amino acid sequence, with a peptide residue which can bind to a solid phase. After binding to a suitable solid phase, the fusion protein is washed free of contaminants

19990113

DE 1998-19801154 A 19980114 WO 1999-EP158 W 19990113

and optionally radiolabeled, and the peptide linker is then cleaved with a proteinase such as Factor Xa to release the purified TSH receptor protein. The purified receptor may be administered orally to induce tolerance, or may be used in an immunopptn. assay for determination of autoantibodies to TSH receptors in diagnosis of Basedow's disease.

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 19 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1997:271714 CAPLUS

DOCUMENT NUMBER: 126:316017

TITLE: Detection of thyroidal autoantibodies

AUTHOR(S): Kato, Ryoji

CORPORATE SOURCE: Junior Coll. Med. Technol., Shinshu Univ., Japan

SOURCE: Medical Technology (Tokyo) (1997), 25(3),

233-238

CODEN: METCDS; ISSN: 0389-1887

PUBLISHER: Ishiyaku

DOCUMENT TYPE: Journal; General Review

LANGUAGE: Japanese

AB A review with 13 refs., on methods for detection of thyroidal autoantibodies, thyroidal autoantibodies,

anti-microsome antibodies, anti-TSH receptor antibodies, and

anti-thyroid hormone antibodies.

L4 ANSWER 20 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1996:435782 CAPLUS

DOCUMENT NUMBER: 125:112110

TITLE: Detection of autoantibodies to the thyrotropin

receptor

AUTHOR(S): Dallas, John S.; Prabhakar, Bellur S.

CORPORATE SOURCE: Departments Pediatrics, University Texas, Galveston,

TX, 77555, USA

SOURCE: Endocrine Methods (1996), 299-318.

Editor(s): Thomas, John A. Academic: San Diego,

Calif.

CODEN: 63BWAW

DOCUMENT TYPE: Conference; General Review

LANGUAGE: English

AB A review with 59 refs. Topics include: the TSH (TSH) receptor and normal thyroid function; the TSH receptor and autoimmune

thyroid diseases; and methods to detect

autoantibodies to the TSH receptor, including the

radioreceptor assay and in vivo and in vitro bioassay methods.

L4 ANSWER 21 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1995:518977 CAPLUS

DOCUMENT NUMBER: 122:263513

TITLE: Methods of detecting and combating disorders of the

central nervous system

INVENTOR(S): Rogers, Scott W.; McNamara, James O.; Heinemann,

Stephen F.

PATENT ASSIGNEE(S): Duke University, USA; Salk Institute for Biological

Studies

SOURCE: PCT Int. Appl., 32 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

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                      A1 19950223 WO 1994-US9043
    WO 9505600
                                                             19940810 <--
       W: AU, CA, JP
        RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
    US 5529898 A 19960625 US 1993-109234 19930819 <--
    CA 2169273
                      A1
                            19950223 CA 1994-2169273
                                                             19940810 <--
                           19950314 AU 1994-75602
    AU 9475602
                      A
                                                             19940810 <--
    AU 680939
                      B2 19970814
A1 19960605 EP 1994-925811
                                                             19940810 <--
       R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
    JP 09501770 T 19970218 JP 1994-507060 19940810 <--
RITY APPLN. INFO.: US 1993-109234 A 19930819
WO 1994-US9043 W 19940810
PRIORITY APPLN. INFO.:
```

AB A method of screening a subject for a central nervous system disorder caused by autoimmune disease (e.g., an inflammatory seizure disorder) comprises collecting a sample from the subject and then detecting the presence or absence of anti-glutamate receptor autoantibodies (e.g., anti-GluR3 glutamate receptor autoantibodies) in the biol. sample. The presence of such autoantibodies indicates the subject is afflicted with a central nervous system disorder caused by autoimmune disease. Methods of treating such disease by reducing the number of autoantibodies available to bind to glutamate receptors in the subject are also disclosed.

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                custom IPC display formats
NEWS 5 JAN 28 MARPAT searching enhanced
NEWS 6 JAN 28 USGENE now provides USPTO sequence data within 3 days
                of publication
NEWS 7 JAN 28
               TOXCENTER enhanced with reloaded MEDLINE segment
NEWS 8 JAN 28 MEDLINE and LMEDLINE reloaded with enhancements
NEWS 9 FEB 08 STN Express, Version 8.3, now available
NEWS 10 FEB 20 PCI now available as a replacement to DPCI
NEWS 11 FEB 25 IFIREF reloaded with enhancements
NEWS 12 FEB 25 IMSPRODUCT reloaded with enhancements
NEWS 13 FEB 29 WPINDEX/WPIDS/WPIX enhanced with ECLA and current
               U.S. National Patent Classification
NEWS 14 MAR 31 IFICDB, IFIPAT, and IFIUDB enhanced with new custom
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IPC display formats

- NEWS 15 MAR 31 CAS REGISTRY enhanced with additional experimental spectra
- NEWS 16 MAR 31 CA/Caplus and CASREACT patent number format for U.S. applications updated
- NEWS 17 MAR 31 LPCI now available as a replacement to LDPCI
- NEWS 18 MAR 31 EMBASE, EMBAL, and LEMBASE reloaded with enhancements
- NEWS 19 APR 04 STN AnaVist, Version 1, to be discontinued
- NEWS 20 APR 15 WPIDS, WPINDEX, and WPIX enhanced with new predefined hit display formats
- NEWS 21 APR 28 EMBASE Controlled Term thesaurus enhanced
- NEWS 22 APR 28 IMSRESEARCH reloaded with enhancements
- NEWS 23 MAY 30 INPAFAMDB now available on STN for patent family searching
- NEWS 24 MAY 30 DGENE, PCTGEN, and USGENE enhanced with new homology sequence search option

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=> S Folate receptor (S) label? (L) assay L2 5 FOLATE RECEPTOR (S) LABEL? (L) ASSAY

=> D TI 12 1-5

- L2 ANSWER 1 OF 5 MEDLINE on STN
- ${\tt TI}$ Preparation and tumor cell uptake of poly(N-isopropylacrylamide) folate conjugates.
- L2 ANSWER 2 OF 5 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN
- ${\tt TI}$ Preparation and tumor cell uptake of poly(N-isopropylacrylamide) folate conjugates.
- L2 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Immunoassay for detection of autoantibodies to folate binding protein
- L2 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Preparation and Tumor Cell Uptake of Poly(N-isopropylacrylamide) Folate Conjugates
- L2 ANSWER 5 OF 5 EMBASE COPYRIGHT (c) 2008 Elsevier B.V. All rights reserved on STN
- TI Molecular targeting and imaging of non-functional pituitary tumors: Preliminary results.

=> D IBIB abs L2 2-4

L2 ANSWER 2 OF 5 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN

ACCESSION NUMBER: 2002:347024 BIOSIS DOCUMENT NUMBER: PREV200200347024

TITLE: Preparation and tumor cell uptake of poly(N-

isopropylacrylamide) folate conjugates.

AUTHOR(S): Dube, Denis; Francis, Mira; Leroux, Jean-Christophe;

Winnik, Francoise M. [Reprint author]

CORPORATE SOURCE: Department of Chemistry and Faculty of Pharmacy, Universite

de Montreal, succursale Centre Ville, Montreal, QC, H3C

3J7, Canada

francoise.winnik@umontreal.ca

SOURCE: Bioconjugate Chemistry, (May-June, 2002) Vol. 13, No. 3,

pp. 685-692. print.

CODEN: BCCHES. ISSN: 1043-1802.

DOCUMENT TYPE: Article LANGUAGE: English

ENTRY DATE: Entered STN: 19 Jun 2002

Last Updated on STN: 19 Jun 2002

AB Folate conjugates (PNIPAM-NH-FA) of a copolymer of N-isopropylacrylamide (NIPAM) and amino-N-ethylenedioxy-bis(ethylacrylamide) were prepared by an efficient synthesis leading to random grafting, via a short dioxyethylene spacer, of apprx7 folic acid residues per macromolecule. The chemical composition of the copolymer was characterized by 1H NMR and UV/vis spectroscopy. A fluorophore-labeled folate PNIPAM conjugate was tested by in vitro assays performed with cultured KB-31 cells overexpressing the folate receptor. The cellular uptake of the copolymer was found to be temperature dependent and was competitively decreased by free folic acid, indicating that the polymer uptake is mediated specifically by the folate receptor. Hydrophobically modified folate conjugates of NIPAM, amino-N'-ethylenedioxy-bis(ethylacrylamide) copolymers, bearing a small number of n-octadecyl groups were prepared following a modified synthetic procedure for use in future studies of FA-targeted liposomes.

L2 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:513611 CAPLUS

DOCUMENT NUMBER: 145:26550

TITLE: Immunoassay for detection of autoantibodies to folate

binding protein

INVENTOR(S): Cabrera, Robert M.; Finnell, Richard PATENT ASSIGNEE(S): The Texas A & M University System, USA

SOURCE: PCT Int. Appl., 25 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PA: | PATENT NO. | | | | | D | DATE | | APPLICATION NO. | | | | | DATE | | | |
|---------|--------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------------|---|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | 2006058287
2006058287 | | | | | | WO 2005-US42906 | | | | | 20051128 | | | | | |
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| | 0500 | KG, | KZ, | MD, | RU, | ТJ, | | · | · | · | , | , | , | · | · | , | · |
| US | 20060115860 | | | | A1 20060601 | | | CA 2005-2588893
US 2005-288014
EP 2005-852272 | | | | 20051128 | | | | | |
| | | AT, | BE, | BG, | CH, | CY, | CZ,
LV, | DE, | DK, | EE, | ES, | FI, | FR, | GB, | GR, | HU, | |
| PRIORIT | Y APP | LN. | INFO | . : | | | | | | US 2 | | | | | | 0041:
0051: | |

AΒ The present invention is directed to an assay that detects autoantibodies to folate receptor and can be used in the clin. diagnostic testing of these antibodies in humans. The assay described herein has several features that offer advantages over the existing methods. Some of these features include adaptability to high-throughput processing, the use of an Ig antibody to bind autoantibodies bound to folate receptor or the use of enzyme-labeled folic acid to bind folate binding protein and use of fluorescence or chemiluminescence for detection. Using an ELISA-based assay, the disclosed invention demonstrated that folate-binding proteins from human, mouse, and cow could be used as probes fro folate-binding proteins autoantibodies. This assay thereby avoids the use of radioactivity and can be automated and scaled to process hundreds of samples safely and simultaneously. The present invention is also directed to a diagnostic kit to detect autoantibodies to the folate receptor in serum from an individual. Serum samples are obtained from women during mid-gestational pregnancy carrying fetuses suspected of having neural tube defects, and the samples are tested to identify the presence, absence, and relative abundance of folate-binding protein autoantibodies.

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L2 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN
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ACCESSION NUMBER: 2002:242859 CAPLUS

DOCUMENT NUMBER: 137:10852

TITLE: Preparation and Tumor Cell Uptake of

Poly(N-isopropylacrylamide) Folate Conjugates

AUTHOR(S): Dube, Denis; Francis, Mira; Leroux, Jean-Christophe;

Winnik, Francoise M.

CORPORATE SOURCE: Department of Chemistry and Faculty of Pharmacy, Universite de Montreal, Montreal, QC, H3C 3J7, Can.

SOURCE: Bioconjugate Chemistry (2002), 13(3), 685-692

CODEN: BCCHES; ISSN: 1043-1802

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

AB Folate conjugates (PNIPAM-NH-FA) of a copolymer of N-isopropylacrylamide (NIPAM) and amino-N'-ethylenedioxy-bis(ethylacrylamide) were prepared by an efficient synthesis leading to random grafting, via a short dioxyethylene spacer, of .apprx.7 folic acid residues per macromol. The chemical

composition of

the copolymer was characterized by 1H NMR and UV/vis spectroscopy. A fluorophore-labeled folate PNIPAM conjugate was tested by in vitro assays performed with cultured KB-31 cells overexpressing the folate receptor. The cellular uptake of the copolymer was found to be temperature dependent and was competitively decreased by free folic acid, indicating that the polymer uptake is mediated specifically by the folate receptor. Hydrophobically modified folate conjugates of NIPAM, amino-N'-ethylenedioxy-bis(ethylacrylamide) copolymers, bearing a small number of n-octadecyl groups were prepared following a modified synthetic procedure for use in future studies of FA-targeted liposomes.

REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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NEWS 4 NOV 26 CHEMSAFE now available on STN Easy

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coverage of complete UK patent families

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will change in 2009 for STN-Columbus and STN-Tokyo

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NEWS 11 FEB 02 Simultaneous left and right truncation (SLART) added for CERAB, COMPUAB, ELCOM, and SOLIDSTATE

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|------|-----|-----|----|--|
| NEWS | 13 | FEB | 06 | Patent sequence location (PSL) data added to USGENE |
| NEWS | 14 | FEB | 10 | COMPENDEX reloaded and enhanced |
| NEWS | 15 | FEB | 11 | WTEXTILES reloaded and enhanced |
| NEWS | 16 | FEB | 19 | New patent-examiner citations in 300,000 CA/CAplus |
| | | | | patent records provide insights into related prior art |
| NEWS | 17 | FEB | 19 | Increase the precision of your patent queries use |
| | | | | terms from the IPC Thesaurus, Version 2009.01 |
| NEWS | 18 | FEB | 23 | Several formats for image display and print options |
| | | | | discontinued in USPATFULL and USPAT2 |
| NEWS | 19 | FEB | 23 | MEDLINE now offers more precise author group fields |
| | | | | and 2009 MeSH terms |
| NEWS | 20 | FEB | 23 | TOXCENTER updates mirror those of MEDLINE - more |
| | | | | precise author group fields and 2009 MeSH terms |
| NEWS | 21 | FEB | 23 | The state of the s |
| | | | | STN patent clusters |
| NEWS | 22 | FEB | 25 | USGENE enhanced with patent family and legal status |
| | | | | display data from INPADOCDB |
| NEWS | 23 | MAR | 06 | INPADOCDB and INPAFAMDB enhanced with new display |
| | | | | formats |
| NEWS | 24 | MAR | 11 | EPFULL backfile enhanced with additional full-text |
| | 0.5 | | | applications and grants |
| NEWS | 25 | MAR | 11 | ESBIOBASE reloaded and enhanced |

NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3, AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

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- => S Autoantibody (S) detection (S) disease AND review AND pd<=20031107 1 FILES SEARCHED...
- L1 64 AUTOANTIBODY (S) DETECTION (S) DISEASE AND REVIEW AND PD<=200311
- => Dup REM L1

PROCESSING COMPLETED FOR L1

L2 54 DUP REM L1 (10 DUPLICATES REMOVED)

ANSWERS '1-3' FROM FILE MEDLINE

ANSWERS '4-44' FROM FILE CAPLUS

ANSWERS '45-54' FROM FILE EMBASE

- => D Ti L2 1-3
- L2 ANSWER 1 OF 54 MEDLINE on STN DUPLICATE 4
- TI Ovarian autoimmune disease and ovarian autoantibodies.
- L2 ANSWER 2 OF 54 MEDLINE on STN DUPLICATE 8
- TI Autoantibodies against small cytoplasmic ribonucleoproteins: the anti-Ro/SS-A and anti-La/SS-B autoimmune response. A review of autoantibody detection, autoantigen composition, autoantibody-disease associations and possible etiologic mechanisms.
- L2 ANSWER 3 OF 54 MEDLINE on STN
- TI [Autoimmune liver diseases: the relation to other autoimmune pathology]. Autoimmunnye zabolevaniia pecheni: sviaz' s drugoi autoimmunnoi patologiei.
- => S L2 AND (folate OR folic)
- L3 0 L2 AND (FOLATE OR FOLIC)
- => S L2 AND receptor
- L4 6 L2 AND RECEPTOR
- => D Ti L4 1-6
- L4 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2009 ACS on STN
- TI Immunological tests for thyroid disease
- L4 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2009 ACS on STN
- TI Autoimmune disease
- L4 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2009 ACS on STN
- TI New assay systems for thyrotropin receptor antibodies
- L4 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2009 ACS on STN
- TI Detection of autoantibodies to the thyrotropin receptor
- L4 ANSWER 5 OF 6 EMBASE COPYRIGHT (c) 2009 Elsevier B.V. All rights reserved on STN
- TI Circulating cardiac autoantibodies in dilated cardiomyopathy and myocarditis: Pathogenetic and clinical significance.
- L4 ANSWER 6 OF 6 EMBASE COPYRIGHT (c) 2009 Elsevier B.V. All rights reserved on STN
- TI Autoantibodies, autoimmune diseases, and vasculitis in the aged.

- L4 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2009 ACS on STN
- TI Immunological tests for thyroid disease
- L4 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2009 ACS on STN
- TI Autoimmune disease
- L4 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2009 ACS on STN
- TI New assay systems for thyrotropin receptor antibodies
- L4 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2009 ACS on STN
- TI Detection of autoantibodies to the thyrotropin receptor
- L4 ANSWER 5 OF 6 EMBASE COPYRIGHT (c) 2009 Elsevier B.V. All rights reserved on STN
- TI Circulating cardiac autoantibodies in dilated cardiomyopathy and myocarditis: Pathogenetic and clinical significance.
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- TI Autoantibodies, autoimmune diseases, and vasculitis in the aged.

=> D Ibib abs L4 1-6

L4 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:824398 CAPLUS

DOCUMENT NUMBER: 140:251856

TITLE: Immunological tests for thyroid disease

AUTHOR(S): Ikeda, Hitoshi

CORPORATE SOURCE: Department of Laboratory Medicine, Saitama Medical

Center, Japan

SOURCE: Rinsho Byori Rebyu, Tokushugo (2003), 124,

66-69

CODEN: RBRTF3

PUBLISHER: Rinsho Byori Kankokai DOCUMENT TYPE: Journal; General Review

LANGUAGE: Japanese

AB A review on detection of autoantibodies to

thyroglobulin (Tg), thyroid peroxidase (TPO) and TSH receptor in

thyroid disease using immunol. tests.

L4 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2001:274333 CAPLUS

DOCUMENT NUMBER: 135:179209

TITLE: Autoimmune disease AUTHOR(S): Keren, David F.

CORPORATE SOURCE: Warde Medical Laboratory, University of Michigan, MI,

USA

SOURCE: Immunoassay Handbook, (2nd Edition) (2001),

681-699. Editor(s): Wild, David. Nature Publishing

Group: Basingstoke, UK.

CODEN: 69BEBL

DOCUMENT TYPE: Conference; General Review

LANGUAGE: English

AB A review with 36 refs. regarding the various assays for diagnosis of autoimmune disease. Autoantibodies used for screening for autoimmune disease include anti-nuclear antibodies; anti-double-stranded DNA; anti-Sm; anti-ribonucleoprotein; anti-SSA/Ro; anti-SSB/La; anti-histone; anti-deoxyribonucleoprotein; anti-centromere; anti-Scl-70; the rheumatoid factor; anti-neutrophil cytoplasmic antibodies;

anti-glomerular basement membrane; anti-Jo-1; anti-microsomal; islet cell

autoantibodies; anti-adrenal cortical antibodies; anti-parietal cell antibodies; anti-mitochondrial antibodies; anti-smooth muscle antibodies; anti-liver-kidney microsomal; IgA anti-endomysium tissue transglutaminase; IgG and IgA anti-gliadin; anti-acetylcholine receptor;

striational antibodies; calcium channel antibodies; and anti-cardiolipin

antibodies.

PUBLISHER:

REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2000:14177 CAPLUS

DOCUMENT NUMBER: 132:292289

TITLE: New assay systems for thyrotropin receptor

antibodies

AUTHOR(S): Morgenthaler, Nils G.

CORPORATE SOURCE: Research Department, B.R.A.H.M.S. Diagnostica GmbH,

Berlin, 12099, Germany

SOURCE: Current Opinion in Endocrinology & Diabetes (

1999), 6(4), 251-260

CODEN: CENDES; ISSN: 1068-3097 Lippincott Williams & Wilkins

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review with 74 refs. The detection of

autoantibodies to the TSH receptor is a useful tool for the diagnosis of Graves' disease. Historically, there are two established methods for this purpose. One is the radioreceptor assay based on the porcine TSH-R, where autoantibodies and labeled bovine TSH compete for the binding sites of the receptor. The other method is based on the ability of some autoantibodies similar to TSH to induce the second messenger cAMP in certain cell lines. These so-called bioassays are able to distinguish between stimulating or blocking autoantibodies, based on their biol. activity, to either enhance or inhibit the cAMP production Ten years after the cloning of the human TSH-R, these two basic detection principles were finally improved. In this article, the author summarizes the latest developments in TSH-R autoantibody assay technol. and outlines the current research on alternative approaches, such as direct-binding assays. Controversies related to autoantibody terminol. and assay interpretation are also addressed.

REFERENCE COUNT: 74 THERE ARE 74 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1996:435782 CAPLUS

DOCUMENT NUMBER: 125:112110

ORIGINAL REFERENCE NO.: 125:20995a,20998a

TITLE: Detection of autoantibodies to the thyrotropin

receptor

AUTHOR(S): Dallas, John S.; Prabhakar, Bellur S.

CORPORATE SOURCE: Departments Pediatrics, University Texas, Galveston,

TX, 77555, USA

SOURCE: Endocrine Methods (1996), 299-318.

Editor(s): Thomas, John A. Academic: San Diego,

Calif.

CODEN: 63BWAW

DOCUMENT TYPE: Conference; General Review

LANGUAGE: English

AB A review with 59 refs. Topics include: the TSH (TSH) receptor and normal thyroid function; the TSH receptor and autoimmune thyroid diseases; and methods to detect autoantibodies to the TSH receptor, including the radioreceptor assay and in vivo

and in vitro bioassay methods.

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ACCESSION NUMBER: 2003194450 EMBASE

TITLE: Circulating cardiac autoantibodies in dilated

cardiomyopathy and myocarditis: Pathogenetic and clinical

significance.

AUTHOR: Caforio, Alida L.P. (correspondence); Tona, Francesco CORPORATE SOURCE: Department of Clinical Medicine, University of Padua,

Policlinico Universitario, via N. Giustiniani, 2, 35128

Padua, Italy. alida.caforio@unipd.it

AUTHOR: Mahon, Niall J.; McKenna, William J.

CORPORATE SOURCE: Department of Cardiological Sciences, St. George's Hospital

Medical School, London, United Kingdom.

SOURCE: European Journal of Heart Failure, (1 Aug 2002)

Vol. 4, No. 4, pp. 411-417.

Refs: 50

ISSN: 1388-9842 CODEN: EJHFFS

PUBLISHER IDENT.: S 1388-9842(02)00010-7

COUNTRY: Netherlands

DOCUMENT TYPE: Journal; General Review; (Review)

FILE SEGMENT: 018 Cardiovascular Diseases and Cardiovascular Surgery

026 Immunology, Serology and Transplantation 005 General Pathology and Pathological Anatomy

LANGUAGE: English SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 29 May 2003

Last Updated on STN: 29 May 2003

AΒ Dilated cardiomyopathy (DCM) is a relevant cause of heart failure and a common indication for heart transplantation. It may be idiopathic, familial/genetic, viral, autoimmune or immune-mediated associated with a viral infection. Myocarditis is an inflammatory disease of the myocardium; it may be idiopathic, infectious or autoimmune and may heal or lead to DCM. Thus, in a patient subset, myocarditis and DCM are thought to represent the acute and chronic stages of an organ-specific autoimmune disease of the myocardium. In keeping with this hypothesis, autoimmune features in patients with myocarditis/DCM include: familial aggregation; a weak association with HLA-DR4; abnormal expression of HLA class II on cardiac endothelium on endomyocardial biopsy; and detection of organ- and disease- specific cardiac autoantibodies of the IqG class in the sera of affected patients and symptom-free relatives. The cardiac autoantibodies detected by immunofluorescence are directed against multiple antigens. Two of these, first identified using immunoblotting and confirmed by ELISA, are the atrial-specific α and the ventricular and skeletal muscle β -heavy chain isoform. The α -myosin isoform fulfils the expected criteria for organ-specific autoimmunity, in that immunization with cardiac, but not skeletal myosin reproduces, in susceptible mouse strains, the human disease phenotype of myocarditis/DCM; in addition, α -myosin is entirely cardiac -specific. Additional antigenic targets of heart-reactive autoantibodies include unknown sarcolemmal proteins, mitochondrial enzymes, $\beta\text{--adrenergic}$ and muscarinic receptors. For some of these antibodies, there is in vitro evidence for a functional role. organ-specific cardiac autoantibodies detected by immunofluorescence in symptom-free relatives were associated with echocardiographic features suggestive of early disease. Mid-term follow-up suggests that these antibodies are predictive markers of progression to DCM among symptom-free relatives with or without abnormal echocardiographic findings. .COPYRGT. 2002 European Society of Cardiology. Published by Elsevier Science B.V. All rights reserved.

L4 ANSWER 6 OF 6 EMBASE COPYRIGHT (c) 2009 Elsevier B.V. All rights

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ACCESSION NUMBER: 1993250275 EMBASE

TITLE: Autoantibodies, autoimmune diseases, and vasculitis in the

aged.

AUTHOR: Richmond, G.W., Dr. (correspondence); Yu, B.-H.

CORPORATE SOURCE: Dept of Immunology/Microbiology/Med, Rush-Presbyterian-St

Luke's Med Ctr, 1753 West Congress Parkway, Chicago, IL

60612, United States.

SOURCE: Immunology and Allergy Clinics of North America, (

1993) Vol. 13, No. 3, pp. 647-672.

ISSN: 0889-8561 CODEN: INCAEP

COUNTRY: United States

DOCUMENT TYPE: Journal; General Review; (Review) FILE SEGMENT: 020 Gerontology and Geriatrics

026 Immunology, Serology and Transplantation

031 Arthritis and Rheumatism 037 Drug Literature Index 038 Adverse Reactions Titles

LANGUAGE: English SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 26 Sep 1993

Last Updated on STN: 26 Sep 1993

AB Autoimmunity in the aged is manifested predominantly by the development of autoantibodies that, in the vast majority of individuals, have no pathophysiologic significance. It therefore is critical not to equate the detection of autoantibodies with autoimmune disease. Elderly patients often present with signs and symptoms of autoimmune disease that are atypical when compared with their younger counterparts but nevertheless are characteristic for the elderly. The progression of autoimmune disease in the elderly may be different than in young adults. Similarly, the vasculitis syndromes seen most commonly in the elderly, including GCA, PMR, and certain types of hypersensitivity vasculitis, may be uniquely responsive to environmental control and low doses of medication. Therapeutic interventions for autoimmune disease and vasculitis in older age groups therefore must be adjusted to take this into account. The dictum pertaining to the care of all patients is especially appropriate for the elderly with autoimmune disease and

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vasculitis: Above all, do no harm.

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FILE 'BIOSIS' ENTERED AT 09:22:01 ON 18 MAR 2009

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FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE' ENTERED AT 09:11:29 ON 18 MAR 2009 L1 64 S AUTOANTIBODY (S) DETECTION (S) DISEASE AND REVIEW AND PD<=200

L2 54 DUP REM L1 (10 DUPLICATES REMOVED)

L3 0 S L2 AND (FOLATE OR FOLIC)

L4 6 S L2 AND RECEPTOR

=> D TI 12 1-54

- L2 ANSWER 1 OF 54 MEDLINE on STN DUPLICATE 4
- TI Ovarian autoimmune disease and ovarian autoantibodies.
- L2 ANSWER 2 OF 54 MEDLINE on STN DUPLICATE 8
- TI Autoantibodies against small cytoplasmic ribonucleoproteins: the anti-Ro/SS-A and anti-La/SS-B autoimmune response. A review of autoantibody detection, autoantigen composition, autoantibody-disease associations and possible etiologic mechanisms.
- L2 ANSWER 3 OF 54 MEDLINE on STN
- TI [Autoimmune liver diseases: the relation to other autoimmune pathology]. Autoimmunnye zabolevaniia pecheni: sviaz' s drugoi autoimmunnoi patologiei.
- L2 ANSWER 4 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN DUPLICATE 1
- TI Computer-assisted classification of HEp-2 immunofluorescence patterns in autoimmune diagnostics
- L2 ANSWER 5 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN DUPLICATE 2
- TI Assessment of serological markers associated with rheumatoid arthritis. Diagnostic autoantibodies and conventional disease activity markers
- L2 ANSWER 6 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN DUPLICATE 3
- TI Human autoantibodies as reagents in biomedical research
- L2 ANSWER 7 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN DUPLICATE 5
- TI Clinical utility of serum thyroglobulin measurement
- L2 ANSWER 8 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN DUPLICATE 6
- TI Autoantibodies in neuropsychiatric lupus
- L2 ANSWER 9 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN DUPLICATE 7
- TI Current status of available standards for quality improvement of assays for detection of autoantibodies to nuclear and intracellular antigens
- L2 ANSWER 10 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN
- TI Serological diagnosis of autoimmune liver disease

- L2 ANSWER 11 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN
- TI Autoantibodies in vasculitis
- L2 ANSWER 12 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN
- TI Immunological tests for thyroid disease
- L2 ANSWER 13 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN
- TI An outline of laboratory tests for autoimmune disorders
- L2 ANSWER 14 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN
- TI Kidney and lung disease mediated by anti-glomerular basement membrane antibodies: Detection by Western blot analysis
- L2 ANSWER 15 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN
- TI Detection of antimitochondrial autoantibodies in primary biliary cirrhosis and liver-kidney microsomal antibodies in autoimmune hepatitis
- L2 ANSWER 16 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN
- TI Autoantibodies to glycolipids in peripheral neuropathy
- L2 ANSWER 17 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN
- TI Autoantibodies in autoimmune polyendocrine syndrome type II
- L2 ANSWER 18 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN
- TI New autoantibody for lymphocyte surface molecules and the clinical meaning
- L2 ANSWER 19 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN
- TI Diagnosis of central nervous system vasculitis
- L2 ANSWER 20 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN
- TI Autoimmune disease
- L2 ANSWER 21 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN
- TI Autoantibodies in rheumatic diseases: their detection methods, clinical significances, and molecular analysis of the cognate antigens
- L2 ANSWER 22 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN
- TI Clinical detection of collagen diseases
- L2 ANSWER 23 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN
- TI New ways for the standardization of autoantibody assays: Chimeric monoclonal antibodies
- L2 ANSWER 24 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN
- TI Anti-tissue transglutaminase autoantibodies
- L2 ANSWER 25 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN
- TI Anti-islet autoantibodies in type 1 diabetes
- L2 ANSWER 26 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN
- ${\tt TI}$ Humoral immune response against the growth suppressor p53 in human malignancies
- L2 ANSWER 27 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN
- TI Transfer RNA-associated autoantibodies and their target antigens in connective tissue diseases
- L2 ANSWER 28 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN
- TI Ku antigen and DNA-dependent protein kinase

- L2 ANSWER 29 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN
- TI Hidden autoantibodies
- L2 ANSWER 30 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN
- TI New assay systems for thyrotropin receptor antibodies
- L2 ANSWER 31 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN
- TI Laboratory medicine for surgical pathologist. Autoimmune diseases
- L2 ANSWER 32 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN
- TI Molecular biological methods in diagnosis and treatment of liver diseases
- L2 ANSWER 33 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN
- TI Detection of anti-GPIIb-IIIa autoantibodies and its clinical significance in autoimmune thrombocytopenic purpura
- L2 ANSWER 34 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN
- TI Structure and function of the thyroid iodide transporter and its implications for thyroid disease
- L2 ANSWER 35 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN
- TI Complement and immune complexes
- L2 ANSWER 36 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN
- TI Comparison of antinuclear antibody testing methods: immunofluorescence assay versus enzyme immunoassay
- L2 ANSWER 37 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN
- TI Detection of autoantibodies to the thyrotropin receptor
- L2 ANSWER 38 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN
- TI Autoantibodies in liver diseases and liver cancer
- L2 ANSWER 39 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN
- TI Anti-actin autoantibody in liver diseases
- L2 ANSWER 40 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN
- TI Antibodies to intracellular antigens in systemic autoimmune disease
- L2 ANSWER 41 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN
- TI Strategies for the development of radioanalytical systems for anti-hormonal protein antibodies and autoantibodies in endocrine diseases
- L2 ANSWER 42 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN
- TI Recent progress in the study of autoantibodies to nuclear antigens
- L2 ANSWER 43 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN
- TI Immunohistological investigations and complement analysis in immunological diseases
- L2 ANSWER 44 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN
- TI The autoantibodies: demonstration and interpretation of results
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- TI [Polymyositis, dermatomyositis and inclusion body myositis Nosological aspects].

 Polymyosite, dermatomyosite, myosite a inclusions, aspects nosologiques.
- L2 ANSWER 46 OF 54 EMBASE COPYRIGHT (c) 2009 Elsevier B.V. All rights reserved on STN
- TI Ovarian autoimmune disease and ovarian autoantibodies.

- L2 ANSWER 47 OF 54 EMBASE COPYRIGHT (c) 2009 Elsevier B.V. All rights reserved on STN
- TI Circulating cardiac autoantibodies in dilated cardiomyopathy and myocarditis: Pathogenetic and clinical significance.
- L2 ANSWER 48 OF 54 EMBASE COPYRIGHT (c) 2009 Elsevier B.V. All rights reserved on STN
- TI The laboratory in autoimmune diseases.
- L2 ANSWER 49 OF 54 EMBASE COPYRIGHT (c) 2009 Elsevier B.V. All rights reserved on STN
- TI Cardiac autoantibodies to myosin and other heart-specific autoantigens in myocarditis and dilated cardiomyopathy.
- L2 ANSWER 50 OF 54 EMBASE COPYRIGHT (c) 2009 Elsevier B.V. All rights reserved on STN
- TI [Autoantibodies and type 1 diabetes].
 Repertoire des autoanticorps: Application au diabete de type 1.
- L2 ANSWER 51 OF 54 EMBASE COPYRIGHT (c) 2009 Elsevier B.V. All rights reserved on STN
- TI Neurological paraneoplastic syndromes.
- L2 ANSWER 52 OF 54 EMBASE COPYRIGHT (c) 2009 Elsevier B.V. All rights reserved on STN
- TI The genetic epidemiology and autoimmune pathogenesis of alopecia areata.
- L2 ANSWER 53 OF 54 EMBASE COPYRIGHT (c) 2009 Elsevier B.V. All rights reserved on STN
- TI Evidence for autoimmunity to myosin and other heart-specific autoantigens in patients with dilated cardiomyopathy and their relatives.
- L2 ANSWER 54 OF 54 EMBASE COPYRIGHT (c) 2009 Elsevier B.V. All rights reserved on STN
- TI Autoantibodies, autoimmune diseases, and vasculitis in the aged.
- => D ibib abs L2 1,5,6,7,10,11,18,20,21,23,25,29,32,44,48

L2 ANSWER 1 OF 54 MEDLINE on STN DUPLICATE 4

ACCESSION NUMBER: 2002638180 MEDLINE DOCUMENT NUMBER: PubMed ID: 12396892

TITLE: Ovarian autoimmune disease and ovarian autoantibodies.

AUTHOR: Luborsky Judith

CORPORATE SOURCE: Reproductive Immunology, Department of Obstetrics and

Gynecology, Rush Medical College, 1653 W. Congress Parkway,

Chicago, IL 60612, USA.

SOURCE: Journal of women's health & gender-based medicine,

(2002 Sep) Vol. 11, No. 7, pp. 585-99. Ref: 169

Journal code: 100888719. ISSN: 1524-6094.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

General Review; (REVIEW)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200212

ENTRY DATE: Entered STN: 26 Oct 2002

Last Updated on STN: 27 Dec 2002 Entered Medline: 26 Dec 2002

AB Detection of specific autoantibodies remains the most practical clinical and research marker of autoimmune disease.

The lack of consensus on ovary specific antibodies as a marker for ovarian autoimmunity has clinical and research consequences. The objective of this review is to summarize the evidence for ovarian autoimmunity and the detection of ovary specific autoantibodies in humans. Evidence favors the presence of an autoimmune disease of the ovary. Ovarian autoantibodies are associated primarily with premature ovarian failure (POF) and unexplained infertility. Variations in detection of ovarian autoantibodies are likely to be due to study design elements such as antibody test format, antigen preparation, and criteria for study and comparison groups. In addition, multiple targets appear to be involved in ovarian autoimmunity including ovarian cellular elements and oocyte related antigens. Many studies only assess one target antigen, leaving individuals with ovarian autoimmunity unidentified. The next most significant advance in characterizing ovarian autoimmunity will be definitive identification of the specific antigens and development of standardized tests based on use of specific antigens.

L2 ANSWER 5 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN DUPLICATE 2

ACCESSION NUMBER: 2003:667729 CAPLUS

DOCUMENT NUMBER: 140:40281

TITLE: Assessment of serological markers associated with

rheumatoid arthritis. Diagnostic autoantibodies and

conventional disease activity markers

AUTHOR(S): Marcelletti, John F.; Nakamura, Robert M.

CORPORATE SOURCE: Prometheus Laboratories, San Diego, CA, 92121, USA

SOURCE: Clinical and Applied Immunology Reviews (2003

), 4(2), 109-123

CODEN: CAIRCF; ISSN: 1529-1049

PUBLISHER: Elsevier Science Inc.
DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review. Progress in the detection and quantitation of autoantibodies associated with rheumatoid arthritis (RA) indicates an expanding role for serol. in the diagnosis and predicting the prognosis of the disease. The advent of enzyme-linked immunoadsorbent assay (ELISA) methods for the quantitation of rheumatoid factor (RF) isotypes offers significant RA disease information substantially above that gained using traditional measurements of total RF. The ability to quantitate isotypes adds specificity for the diagnosis of RA and identifies those individuals that will tend to exhibit progressive, erosive disease. Other autoantibodies that are highly specific for RA recognize epitopes associated with proteins containing citrulline

(e.g., anti-keratin and anti-perinuclear factor). A highly specific (92-98%) and relatively sensitive (.apprx.80%) second-generation ELISA has been developed and marketed for the diagnosis of RA using cyclic citrullinated peptide as antigen (CCP). Population based studies indicate that finding multiple RF isotypes or anti-filaggrin antibodies (synonymous with anti-CCP) in apparently normal individuals is highly predictive for the development of RA in subsequent years. More importantly, these markers are being recognized as indicative of disease course. Monitoring C-reactive protein and erythrocyte sedimentation rate continue to be a mainstay for determining RA disease activity, although acute-serum amyloid A

may

be a more sensitive marker for synovial inflammation.

REFERENCE COUNT: 74 THERE ARE 74 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 6 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN DUPLICATE 3

ACCESSION NUMBER: 2003:372568 CAPLUS

DOCUMENT NUMBER: 139:148028

TITLE: Human autoantibodies as reagents in biomedical

research

AUTHOR(S): Kakinuma, T.; Toh, B.-H.; Sentry, J. W.

CORPORATE SOURCE: Faculty of Medicine, Department of Orthopaedic

Surgery, Kyoto University, Kyoto, Japan

SOURCE: Modern Rheumatology (2003), 13(1), 15-21

CODEN: MROHA4; ISSN: 1439-7595

PUBLISHER: Springer-Verlag Tokyo DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

A review. Autoantibodies are typically associated with autoimmune diseases. In some instances the association of specific autoantibodies to a specific autoimmune disease have made their detection invaluable in clin. diagnosis. However, certain autoantibodies show no specific disease association and therefore have limited clin. utility. Nevertheless, autoantibodies are powerful tools for identification, characterization, and functional studies of their cognate autoantigens. In addition, the study of autoantibodies and their cognate autoantigens in human disease and in exptl. animal models can provide valuable insight into disease mechanisms and the factors that ameliorate or reverse disease. This review will focus on three specific sets of autoantibodies, which were initially selected for investigation purely on the basis of their novel patterns of reactivity. These were observed when they were applied to a diagnostic HEp-2 test slide for antinuclear antibody detection by indirect immunofluorescence. The target autoantigens were identified as the trans-Golgi network protein

GOLGA4 (Golgin 245 or p230), the early endosome antigen-1 (EEA1) and a yet

to be identified and fully characterized phosphoepitope(s) restricted to chromosomal arms of condensed mitotic/meiotic chromosomes (MCA1). This laboratory has exploited sera which are reactive to these autoantigens for their

review highlights the uses of autoantibodies that may have limited diagnostic or prognostic utility, but are nonetheless novel reagents in the prosecution of mol. cell biol.

identification and characterization, and in functional studies.

REFERENCE COUNT: 67 THERE ARE 67 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 7 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN DUPLICATE 5

ACCESSION NUMBER: 2002:739076 CAPLUS

DOCUMENT NUMBER: 138:120509

TITLE: Clinical utility of serum thyroglobulin measurement

AUTHOR(S): Spencer, Carole A.

CORPORATE SOURCE: Div. Endocrinol., Keck Sch. Med., Univ. South.

California, Los Angeles, CA, USA

SOURCE: Current Opinion in Endocrinology & Diabetes (

2002), 9(5), 401-406

CODEN: CENDES; ISSN: 1068-3097 Lippincott Williams & Wilkins

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

PUBLISHER:

AB A review. Serum thyroglobulin (Tg) measurement is primarily used as a tumor marker to detect recurrent or persistent disease in patients with differentiated thyroid carcinomas. It is essential that clinicians interpret serum Tg values with respect to the patient-specific pathol. and treatment and the tech. limitations of the Tg method used. Important patient factors include the underlying thyroid pathol., the degree of any surgery and radioiodine therapy, and most importantly the TSH status of the patient at the time the blood specimen was drawn. Methodol. factors relate to the class of Tg method used: RIA or immunometric assay (IMA). Currently, most clin. labs. use Tg IMA methods although such methods have well-recognized limitations that impact the clin. interpretation of serum Tg values. These limitations include wide

between-method variability (which precludes the use of different Tg methods for serial monitoring of patients), inadequate sensitivity and suboptimal between-run precision (which impairs the early detection of recurrence), a propensity for "hook" problems (which can lead to underestimation of the very high serum Tg values typical of metastatic disease), and Tg autoantibody (TgAb) interference (which results in falsely low or undetectable serum Tg values in TgAb-pos. patients with disease). This review will discuss how these patient and methodol. factors impact the clin.

interpretation of serum Tg measurements.

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 10 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:812418 CAPLUS

DOCUMENT NUMBER: 139:306026

TITLE: Serological diagnosis of autoimmune liver disease

AUTHOR(S): Klein, R.

CORPORATE SOURCE: Medizinische Klinik II, Tuebingen, 72076, Germany

SOURCE: MTA Dialog (2003), 4(9), 746-750 CODEN: MDTIC4; ISSN: 1439-071X

PUBLISHER: Hoppenstedt Bonnier Zeitschriften GmbH

DOCUMENT TYPE: Journal; General Review

LANGUAGE: German

AB A review on serol. diagnostics of autoantibodies in autoimmune hepatitis (AIH), primary biliary cirrhosis (PBC), and primary sclerotic cholangitis (PSC). Typical serol. parameters in AIH and PBC, detection of perinuclear anti-neutrophil-cytoplasmic antibodies in PSC, and autoantibody screening in diagnosis of autoimmune liver diseases are discussed.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 11 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:385231 CAPLUS

DOCUMENT NUMBER: 139:99488

TITLE: Autoantibodies in vasculitis

AUTHOR(S): Wiik, Allan

CORPORATE SOURCE: Department of Autoimmunology, Statens Serum Institut,

Copenhagen, Den.

SOURCE: Arthritis Research & Therapy (2003), 5(3),

147-152

CODEN: ARTRCV; ISSN: 1478-6362

URL: http://arthritis-

research.com/content/pdf/ar758.pdf

PUBLISHER: BioMed Central Ltd.

DOCUMENT TYPE: Journal; General Review; (online computer file)

LANGUAGE: English

AB A review. Before the mid-1980s the only autoantibody widely used to assist in diagnosing vasculitic disease was IgG antibody to the α3 domain of the noncollagenous part of type IV collagen (anti-glomerular basement membrane). Since that time, antineutrophil cytoplasmic antibodies (ANCAs) directed at the azurophilic granule proteins proteinase-3 and myeloperoxidase have been established as clin. useful autoantibodies to support a diagnosis of Wegeners granulomatosis, microscopic polyangiitis, Churg-Strauss syndrome and limited forms of these primary, small vessel necrotizing and often granulomatous vasculitides. The establishment of standardized methods for identifying those antibodies was needed before they could be used in clin. practice. The levels of both types of ANCAs tend to increase in parallel with the degree of clin. disease activity, and they decrease with successful immunosuppressive therapy. More than one assay may have to be used to

discover imminent exacerbations in proteinase-3-ANCA associated syndromes. Although autoantibodies to endothelial cells may be important players in the pathogenesis of several vasculitic conditions, they have not gained clin. popularity because of lack of standardized detection methods.

REFERENCE COUNT: 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 18 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:421791 CAPLUS

DOCUMENT NUMBER: 136:384499

TITLE: New autoantibody for lymphocyte surface molecules and

the clinical meaning

AUTHOR(S): Kato, Tomohiro

CORPORATE SOURCE: Res. Cent. Incurable Dis., St. Marianna Med. Univ.,

Japan

SOURCE: Ensho to Men'eki (2002), 10(3), 315-319

CODEN: ENMEFA; ISSN: 0918-8371

PUBLISHER: Sentan Igakusha

DOCUMENT TYPE: Journal; General Review

LANGUAGE: Japanese

AB A review on detection, formation mechanism, and clin.

significance of autoantibodies to lymphocyte surface antigens,

such as CTLA-4 and CD69, in autoimmune diseases.

L2 ANSWER 20 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2001:274333 CAPLUS

DOCUMENT NUMBER: 135:179209

TITLE: Autoimmune disease AUTHOR(S): Keren, David F.

CORPORATE SOURCE: Warde Medical Laboratory, University of Michigan, MI,

USA

SOURCE: Immunoassay Handbook, (2nd Edition) (2001),

681-699. Editor(s): Wild, David. Nature Publishing

Group: Basingstoke, UK.

CODEN: 69BEBL

DOCUMENT TYPE: Conference; General Review

LANGUAGE: English

AB A review with 36 refs. regarding the various assays for diagnosis of autoimmune disease. Autoantibodies used for screening for autoimmune disease include anti-nuclear antibodies; anti-double-stranded DNA; anti-Sm; anti-ribonucleoprotein; anti-SSA/Ro; anti-SSB/La; anti-histone; anti-deoxyribonucleoprotein; anti-centromere; anti-Scl-70; the rheumatoid factor; anti-neutrophil cytoplasmic antibodies; anti-glomerular basement membrane; anti-Jo-1; anti-microsomal; islet cell autoantibodies; anti-adrenal cortical antibodies; anti-parietal cell antibodies; anti-mitochondrial antibodies; anti-smooth muscle antibodies; anti-liver-kidney microsomal; IgA anti-endomysium tissue transglutaminase; IgG and IgA anti-gliadin; anti-acetylcholine receptor; striational

antibodies; calcium channel antibodies; and anti-cardiolipin antibodies.

REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 21 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:39721 CAPLUS

DOCUMENT NUMBER: 137:107697

TITLE: Autoantibodies in rheumatic diseases : their detection methods, clinical

significances, and molecular analysis of the cognate

antigens

AUTHOR(S): Hirakata, Michio

CORPORATE SOURCE: School of Medicine, Department of Interna lMedicine,

Keio University, Japan

Igaku no Ayumi (2001), 199(5), 313-320 SOURCE .

CODEN: IGAYAY; ISSN: 0039-2359

Ishiyaku Shuppan PUBLISHER:

DOCUMENT TYPE: Journal; General Review

LANGUAGE: Japanese

A review on determination of autoantibodies found in collagen diseases, AB

clin. significance, and antigens related thereto.

ANSWER 23 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2001:869658 CAPLUS

DOCUMENT NUMBER: 136:367926

TITLE: New ways for the standardization of autoantibody

assays: Chimeric monoclonal antibodies

Simon, Thomas; Kneusel, Richard; Haubruck, Heinz; AUTHOR(S):

Liedvogel, Bodo

CORPORATE SOURCE: Diarect Ag, Freiburg, D-79111, Germany

Scandinavian Journal of Clinical and Laboratory SOURCE:

Investigation, Supplement (2001), 61(235),

91-97

CODEN: SCLSAH; ISSN: 0085-591X

PUBLISHER: Taylor & Francis

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

A review. Recombinant production of human autoantigens and new

assay methodologies have created new opportunities for the

detection of autoantibodies in autoimmune

disease situations. However, the standardization of test results remains unsatisfactory which can be traced to supply and batch variation problems of the patient sera used as standard materials. Human monoclonal autoantibodies can be used as novel stds., but are difficult to generate and produce routinely. We present a strategy based on a transgenic mouse strain producing chimeric human IgG1 antibodies after immunization. Together with traditional mouse hybridoma technol. this approach allows

creation of large panels of chimeric monoclonal autoantibodies for

standardization purposes.

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 25 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2000:134697 CAPLUS

DOCUMENT NUMBER: 132:306851

TITLE: Anti-islet autoantibodies in type 1 diabetes

AUTHOR(S): Kawasaki, Eiji; Eguchi, Katsumi

CORPORATE SOURCE: School of Medicine, First Department of Internal

Medicine, Nagasaki University, Japan

Igaku no Ayumi (2000), 192(5), 451-456 SOURCE: CODEN: IGAYAY; ISSN: 0039-2359

Ishiyaku Shuppan PUBLISHER:

DOCUMENT TYPE: Journal; General Review

LANGUAGE: Japanese

A review with 22 refs. The type 1 diabetes is the disease associated with anti-islet autoantibodies, and the

diagnosis and detection of the autoantibodies are

discussed.

ANSWER 29 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2000:445304 CAPLUS

134:84674 DOCUMENT NUMBER:

TITLE: Hidden autoantibodies

Lorber, Margalit; Shoenfeld, Yehuda AUTHOR(S):

Institute of Clinical Immunology and Allergy, Rambam CORPORATE SOURCE:

Medical Center, The B. Rappaport Faculty of Medicine,

Haifa, Israel

SOURCE: Clinical Reviews in Allergy & Immunology (2000

), 18(1), 51-58

CODEN: CRAIF2; ISSN: 1080-0549

PUBLISHER: Humana Press Inc.
DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review with 27 refs. is presented regarding hidden

autoantibodies (HAAs) and a possible pathogenic role for these antibodies in the evolution of autoimmune diseases. Topics discussed include the methods of detection of HAA, the hidden rheumatoid factor, hidden

antiphospholipid antibodies, and other hidden antibodies.

REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 32 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1997:524400 CAPLUS

DOCUMENT NUMBER: 127:215543

ORIGINAL REFERENCE NO.: 127:41813a,41816a

TITLE: Molecular biological methods in diagnosis and

treatment of liver diseases

AUTHOR(S): Worman, Howard J.

CORPORATE SOURCE: Departments of Medicine and of Anatomy and Cell

Biology, College of Physicians and Surgeons, Columbia

University, New York, NY, 10032, USA

SOURCE: Clinical Chemistry (Washington, D. C.) (1997

), 43(8B, Pt. 2), 1476-1486 CODEN: CLCHAU; ISSN: 0009-9147

PUBLISHER: American Association for Clinical Chemistry

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review, with 103 refs. Mol. biol. is making a tremendous

impact on the diagnosis and treatment of liver diseases. Methods such as the polymerase chain reaction are changing the way physicians diagnose and monitor patients with viral hepatitis. Assays based on recombinant

protein antigens allow for detection of specific autoantibodies in diseases such as primary biliary $% \left(1\right) =\left(1\right) \left(1\right) \left($

cirrhosis. The diagnosis of inherited metabolic diseases, such as hemochromatosis and Wilson disease, is being revolutionized by discovery of the defective genes involved and the development of methods to rapidly sequence DNA and identify mutations. Treatments and preventive measures are now possible with use of drugs and vaccines produced by recombinant DNA technol. Gene therapy and nucleic acid-based therapeutics are also realistic future treatment options for individuals with liver diseases.

REFERENCE COUNT: 103 THERE ARE 103 CITED REFERENCES AVAILABLE FOR

THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L2 ANSWER 44 OF 54 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1977:14720 CAPLUS

DOCUMENT NUMBER: 86:14720
ORIGINAL REFERENCE NO.: 86:2399a,2402a

TITLE: The autoantibodies: demonstration and interpretation

of results

AUTHOR(S): Monier, J. C.; Sepetjian, M.

CORPORATE SOURCE: Lab. Hyg. Action Sanit. Soc., Lyons, Fr. SOURCE: Immunochim. Clin., Journ. Natl. Biol. (1975)

, Meeting Date 1974, 121-30. Simep Ed.: Villeurbanne,

Fr.

CODEN: 34NBA3

DOCUMENT TYPE: Conference; General Review

LANGUAGE: French

A review with 51 refs., on the pathogenic role of AΒ tissue-specific autoantibodies, their detection, and diagnostic value in various diseases, e.g. cancer, diabetes, nephritis, anemia, myasthemia, and heart and skin diseases.

ANSWER 48 OF 54 EMBASE COPYRIGHT (c) 2009 Elsevier B.V. All rights L2

reserved on STN

2003169823 EMBASE ACCESSION NUMBER:

TITLE: The laboratory in autoimmune diseases.

Clemente, M.G.; Conqia, M.; De Virgiliis, Stefano, Prof. AUTHOR:

(correspondence)

CORPORATE SOURCE: Seconda Clinica Pediatrica, Dipto. di Sci.

Biomed./Biotecnologie, Universita di Cagliari, Via Jenner,

09121 Cagliari, Italy. sdevirgi@mcweb.unica.it

Italian Journal of Pediatrics, (Feb 2002) Vol.

28, No. 1, pp. 12-18.

Refs: 28

ISSN: 1720-8424 CODEN: IJPTBE

COUNTRY: Italy

SOURCE:

DOCUMENT TYPE: Journal; General Review; (Review)

FILE SEGMENT: 026 Immunology, Serology and Transplantation

> 007 Pediatrics and Pediatric Surgery

LANGUAGE: English SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 19 May 2003

Last Updated on STN: 19 May 2003

This article aims to provide practical guidelines to orient physicians AB among the laboratory tests currently used in the diagnosis of pediatric autoimmune diseases. The clinical presentation of autoimmune diseases is very complex, and poses real problems for the differential diagnosis. In the recent past, the great progress made in the identification of the major autoantigens involved in many different autoimmune diseases has allowed the development of more precise laboratory methods, thus improving the diagnostic value of serum autoantibody detection in rheumatic, gastrointestinal and endocrine autoimmune diseases. Furthermore, Human Leucocytes Antigens (HLA) typing by serological methods together with the most advanced molecular biology assay, has allowed to better define HLA associations and to clarify the role of HLA typing in the diagnosis of autoimmune disease.

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PASSWORD:

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FILE 'CAPLUS' ENTERED AT 10:31:36 ON 18 MAR 2009

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FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE' ENTERED AT 09:11:29 ON 18 MAR 2009 L1 64 S AUTOANTIBODY (S) DETECTION (S) DISEASE AND REVIEW AND PD<=200

-13.94

-13.94

L2 54 DUP REM L1 (10 DUPLICATES REMOVED)

L3 0 S L2 AND (FOLATE OR FOLIC)

L4 6 S L2 AND RECEPTOR

=> S ((Neural tube defect) OR (congenital defect)) (S) (folate or folic) (P) autoantibody AND pd<=20031107

1 FILES SEARCHED...

L5 0 ((NEURAL TUBE DEFECT) OR (CONGENITAL DEFECT)) (S) (FOLATE OR FOLIC) (P) AUTOANTIBODY AND PD<=20031107

=> S ((Neural tube defect) OR (congenital defect)) (S) (folate or folic) (P) antibody AND pd<=20031107

1 FILES SEARCHED...

L6 4 ((NEURAL TUBE DEFECT) OR (CONGENITAL DEFECT)) (S) (FOLATE OR FOLIC) (P) ANTIBODY AND PD<=20031107

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PROCESSING COMPLETED FOR L6

L7 1 DUP REM L6 (3 DUPLICATES REMOVED)
ANSWER '1' FROM FILE MEDLINE

=> D Ibib abs 17

L7 ANSWER 1 OF 1 MEDLINE on STN DUPLICATE 1

ACCESSION NUMBER: 2004043929 MEDLINE DOCUMENT NUMBER: PubMed ID: 14745937

TITLE: Antibodies to folate receptors impair embryogenesis and

fetal development in the rat.

AUTHOR: da Costa Maria; Sequeira Jeffrey M; Rothenberg Sheldon P;

Weedon Jeremy

CORPORATE SOURCE: SUNY-Downstate Medical Center, Department of Medicine,

Brooklyn, New York 11203, USA.. maria.dacosta@downstate.edu

SOURCE: Birth defects research. Part A, Clinical and molecular

teratology, (2003 Oct) Vol. 67, No. 10, pp.

837-47.

Journal code: 101155107. ISSN: 1542-0752.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE) (RESEARCH SUPPORT, NON-U.S. GOV'T)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200406

ENTRY DATE: Entered STN: 28 Jan 2004

Last Updated on STN: 24 Jun 2004

Entered Medline: 21 Jun 2004

AΒ BACKGROUND: Folic acid (FA) supplementation reduces neural tube defects (NTDs) by 70%. However, the cause of most NTDs cannot be attributed to folate deficiency, to mutations of genes that encode folate pathway enzymes, and folate receptors (FRs) that mediate cellular folate uptake. Mouse embryos nullizygous for the ortholog of the FRalpha gene have lethal congenital abnormalities that are preventable by administration of folinic acid to the dams. To determine whether antibodies to FRs are similarly teratogenic, we studied a rat model. METHODS: Immunohistochemistry with an antiserum to rat FRs was used to identify the receptors on reproductive tissues and embryos. Gestation day (GD) 8 rats received intraperitoneal injections of antiserum to the FRs, and their embryos were examined 2-9 days later. Some rats received pharmacologic doses of folinic acid or dexamethasone before the antiserum was administered. RESULTS: The FRs are present on oocytes, the oviduct, and uterine epithelial cells, and in the embryo at all stages examined between GD4 and GD15. The antiserum has a dose-related effect on embryo viability and organogenesis. Folinic acid prevented teratogenicity resulting from smaller doses of antiserum, but not that caused by larger doses. Resorption of embryos with the larger doses of the antiserum was prevented by dexamethasone. CONCLUSIONS: FRs are expressed on oocytes, epithelial cells of reproductive organs, and embryonic and extraembryonic tissues. Antiserum to FRs administered to pregnant rats causes embryonic damage. Embryo lethality with smaller doses of antiserum is preventable by administration of folinic acid, while larger doses cause embryo damage by immune-mediated cell lysis, which can be prevented by dexamethasone. Copyright 2003 Wiley-Liss, Inc.

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